

HTC-D209/D309

SERVICE MANUAL

AEP Model
UK Model
E Model
Australian Model



HTC-D209 is the compact disc deck in LBT-A27CD / A27CDK / D209CD.
HTC-D309 is the compact disc deck in LBT-A37CD / A37CDK / D309CD.

Photo: HTC-D209

SPECIFICATIONS

Cassette deck

Recording system 4-track 2-channel stereo
Frequency response DOLBY NR OFF
With Type II cassette (Sony UX-S)
40 Hz to 14 kHz (± 3 dB)
With Type I cassette (Sony HF-S)
40 Hz to 13 kHz (± 3 dB)
Wow and flutter W.PEAK $\pm 0.2\%$ (DIN)


Compact disc player

Laser Semiconductr laser ($\lambda = 780$ nm)
Laser output Max, $44.6 \mu W^*$
* This output is the value measured at a distance of about 200 mm from the objective lens surface on the Optical Pick-up Block.

Frequency response 2 Hz to 20 kHz ± 0.5 dB
Signal-to-noise ratio More than 93 dB
Dynamic range More than 90 dB
Harmonic distortion Less than 0.008% (1 kHz)
Channel separation More than 90 dB (1 kHz)

Mass Approx. 5.1 kg
Dimensions Approx. 355 \times 225 \times 305 mm
(w/h/d, including projections)

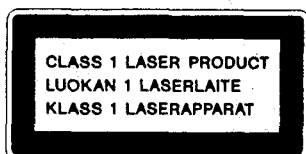
CD Section	Model Name Using Similar Mechanism		HCD-D109
	Base Unit Name		BU-5BD1
DECK Section	Model Name Using Similar Mechanism		HCD-H170/H170K /H700
	Tape Transport Mechanism	DECK A	TCM-190RA12CL
	Type	DECK B	TCM-190RB22CL

Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation.
"DOLBY" and the double-D symbol  are trademarks of Dolby Laboratories Licensing Corporation.



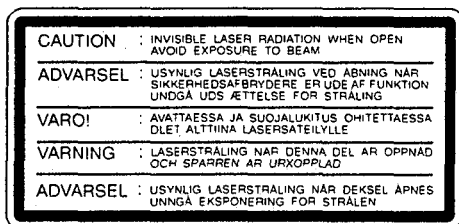
COMPACT DISC DECK
SONY®

This appliance is classified as a CLASS 1 LASER product. The CLASS 1 LASER PRODUCT MARKING is located on the rear exterior.



Laser component in this product is capable of emitting radiation exceeding the limit for Class 1.

The following caution label is located inside the unit.



NOTES ON HANDLING THE OPTICAL PICK-UP BLOCK OR BASE UNIT

The laser diode in the optical pick-up block may suffer electrostatic breakdown because of the potential difference generated by the charged electrostatic load, etc. on clothing and the human body.

During repair, pay attention to electrostatic breakdown and also use the procedure in the printed matter which is included in the repair parts.

The flexible board is easily damaged and should be handled with care.

NOTES ON LASER DIODE EMISSION CHECK

The laser beam on this model is concentrated so as to be focused on the disc reflective surface by the objective lens in the optical pick-up block. Therefore, when checking the laser diode emission, observe more than 30 cm away from the objective lens.

SAFETY-RELATED COMPONENT WARNING!!



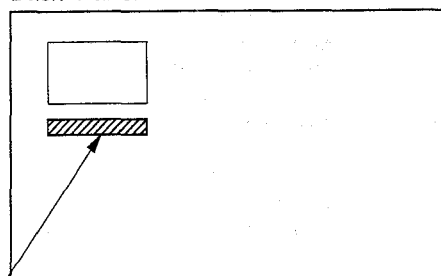
COMPONENTS IDENTIFIED BY MARK  OR DOTTED LINE WITH MARK  ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

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MODEL IDENTIFICATION

Back Panel



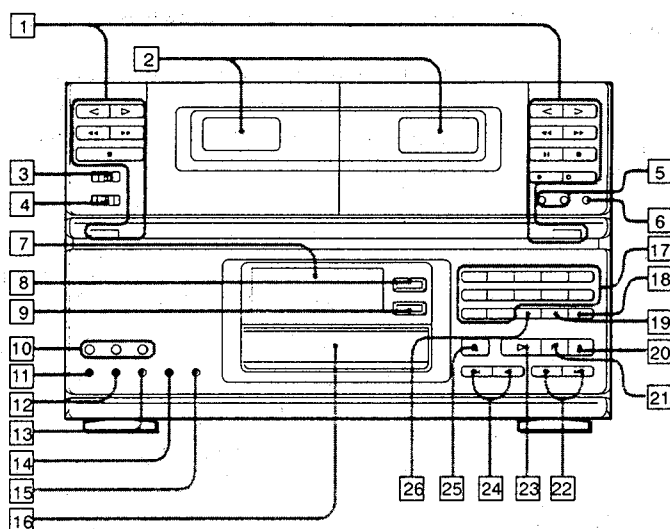
- 4-955-819-01: HTC-D209 AEP, UK, Italian, Germany Mdels.
- 4-955-819-11: HTC-D209 E, East European, Malaysia, Singapore Models.
- 4-955-819-21: HTC-D209 Saudi Arabia, Australian Models.
- 4-955-819-31: HTC-D309 AEP, UK, Italian, Germany Models.
- 4-955-819-41: HTC-D309 E, East European, Malaysia, Singapore, CIS Models.
- 4-955-819-51: HTC-D309 Saudi Arabia, Australian Models.

SECTION 1 GENERAL

Location of Controls

Cassette Deck

- 1 Tape operation buttons
 - ◀◀ Leftward fast winding/AMS*
 - ▶▶ Rightward fast winding/AMS*
 - ▶ Forward play
 - ◀ Reverse play
 - Stop
 - ▲ EJECT
 - || PAUSE (deck B only)
 - REC MUTE (record muting)
(deck B only)
 - REC (record) (deck B only)
- 2 Cassette holders
- 3 DOLBY NR (noise reduction) switch (32, 80)
- 4 DIRECTION MODE selector (28, 32, 38, 80)
- 5 DUBBING SPEED (HIGH/NORMAL) button (38, 40)
- 6 CD SYNCHRO button (80, 84)



Compact Disc Player

- 7 Display window
- 8 EDIT/TIME FADE button (86, 88, 94)
- 9 TIME SET button (86, 94)
- 10 PLAY MODE buttons
 - PROGRAM button (54)
 - SHUFFLE button (50, 52)
 - CONTINUE button (52)
- 11 MUSIC SCAN button (58)
- 12 A.SPACE/A.CUE (auto space/auto cue) button (48, 96)
- 13 TIME button (44)
- 14 REPEAT button (60)
- 15 FADER button (92)
- 16 Disc tray
- 17 Numeric buttons (46, 52)
- 18 CLEAR (program clear) button (56)
- 19 CHECK (program check) button (56)
- 20 ■ (stop) button (42)
- 21 || (pause) button (42)
- 22 ◀◀/▶▶ (manual search) buttons (46)
- 23 ▶ (play) button (42)
- 24 ◀◀/▶▶ (AMS*) buttons (46)
- 25 OPEN/CLOSE ▲ button (42)
- 26 > 12 (over 12) button (46)

* AMS is the abbreviation of Automatic Music Sensor.

SECTION 2 ADJUSTMENTS

2-1. MECHANICAL ADJUSTMENTS

Precautions:

1. Clean the following parts with a denatured-alcoholmoistened swab;

record/playback/erase head	rubber belts
pinch roller	idler
capstan	
2. Demagnetize the record/playback head with a head demagnetizer.
(Head demagnetizer do not approach for the erase head.)
3. Do not use a magnetized screwdriver for the adjustments.
4. After the adjustments, apply suitable locking compound to the parts adjusted.
5. The adjustments should be performed in the rated power supply voltage unless otherwise noted.

Torque Measurement

Torque	Torque meter	Meter reading
FWD	CQ-102C	35 to 60g · cm (0.49 to 0.83 oz · inch)
FWD Back tension	CQ-102C	2 to 6g · cm (0.03 to 0.08 oz · inch)
REV	CQ-102RC	35 to 60g · cm (0.49 to 0.83 oz · inch)
REV Back tension	CQ-102RC	2 to 6g · cm (0.03 to 0.08 oz · inch)
FF, REW	CQ-201B	70 to 110g · cm (0.98 to 1.52 oz · inch)

2-2. ELECTRICAL ADJUSTMENTS

0 dB=0.775 V (AF)

Precautions:

CASSETTE DECK SECTION

1. Demagnetize the record/playback head with a head demagnetizer. (Do not bring the head demagnetizer close to the erase head.)
2. Do not use a magnetized screwdriver for the adjustments.
3. After the adjustments, apply suitable locking compound to the parts adjusted.
4. The adjustments should be performed with the rated power supply voltage unless otherwise noted.
5. The adjustments should be performed in the order given in this service manual. (As a general rule, playback circuit adjustment should be completed before performing recording circuit adjustment.)
6. The adjustments should be performed for both L-CH and R-CH.
- Switches and controls should be set as follows unless otherwise specified.

DOLBY NR switch : OFF

TAPE : TYPE I

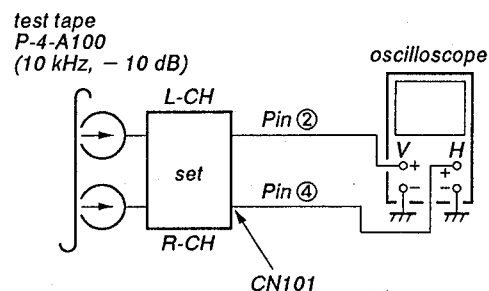
Type	Signal	Used for
P-4-A100	6.3kHz, -10dB	Azimuth Adjustment
P-4-L300	315Hz, 0dB	PB Level Adjustment
WS-48B	3kHz, 0dB	Tape Speed Adjustment

Record/Playback Head Azimuth Adjustment

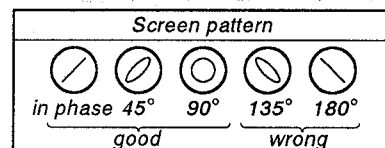
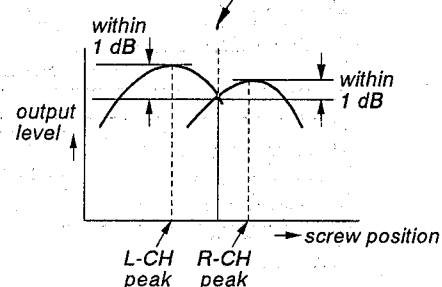
Note : Perform this adjustments for both decks.

Procedure :

1. Mode : FWD playback

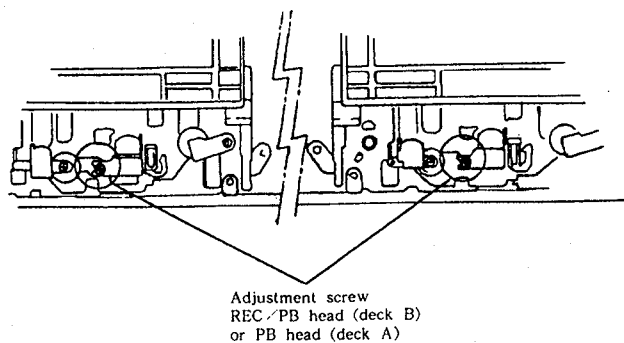


2. Turn the adjustment screw and check output peaks. If the peaks do not match for L-CH and R-CH, turn the adjustment screw so that outputs match within 1 dB of peak.



3. After the adjustments, apply suitable locking compound to the parts adjusted.

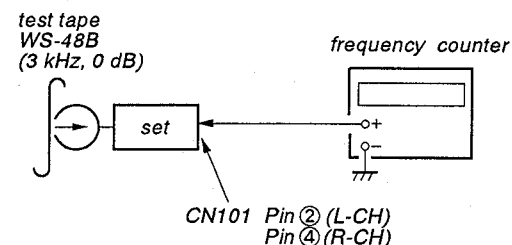
Adjustment Location :



Tape Speed Adjustment. DECK A DECK B

Procedure :

Mode : playback



• High speed adjustment (Must be first Adjustment B deck)

1. Push HIGH speed button.
2. Adjust RV71 so that the frequency counter reads $6,000 \pm 30\text{Hz}$.

• NORMAL speed adjustment

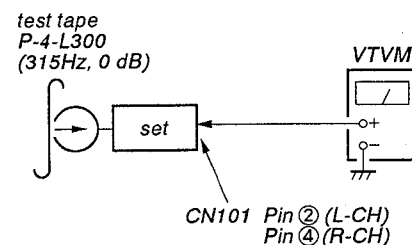
1. Push NORMAL speed button.
2. Adjust RV72 so that the frequency counter reads $3,000 \pm 15\text{Hz}$.

(See right for Adjusting Parts Location)

Frequency difference between deck A and deck B the beginning of the tape should be within 1%.

Playback Level Adjustment DECK A DECK B

Procedure :



Mode : FWD playback

DECK-A side RV11 (L-CH), RV21 (R-CH)

DECK-B side RV11 (L-CH), RV21 (R-CH)

so that the limits below are satisfied.

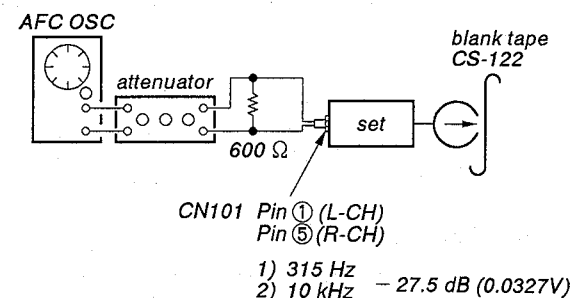
Adjustable limits :

CN101 level : $-7.7 \pm 0.5\text{ dB}$ (0.301 - 0.338)
level difference between the channels : within 1.0dB
(See right for Adjusting Parts Location)

Record BIAS Current Adjustment DECK B

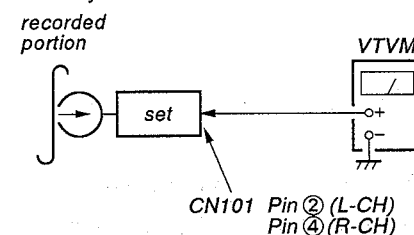
Procedure :

1. Mode : record



- 1) 315 Hz
- 2) 10 kHz -27.5 dB (0.0327V)

2. Mode : Playback



Playback the signal recorder in step 1.

Confirm that the 10kHz playback output is $0 \pm 0.5\text{dB}$ relative to the 315Hz output. If necessary, adjust RV12 (L-CH), RV22 (R-CH) and repeat the steps given above.

(See right for Adjusting Parts Location)

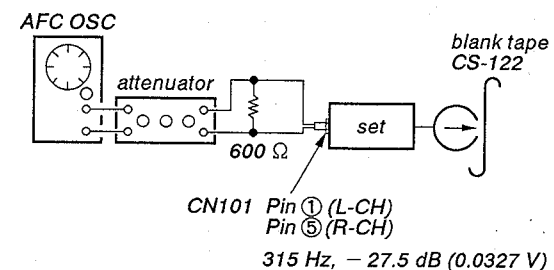
Record Level Adjustment DECK B

Setting :

TAPE : TYPE I

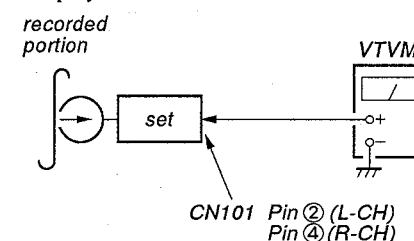
Procedure :

1. Mode : record



- 315 Hz, -27.5 dB (0.0327 V)

2. Mode : playback



3. Playback the signal recorded in step 1.

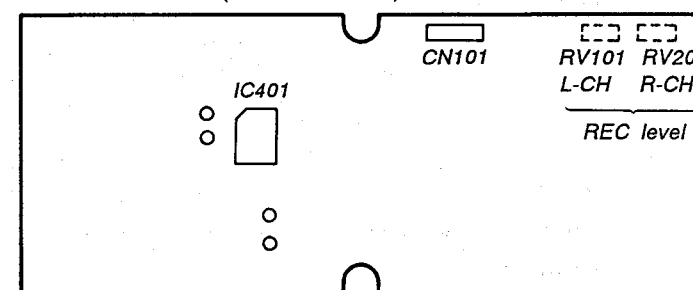
Confirm that the signal level is within the adjustment limits below. If necessary, adjust RV101 (L-CH), RV201 (R-CH) and repeat the step 1-3.

Adjustable limits : $-27.5 \pm 0.5\text{ dB}$ (0.0309 - 0.0346)

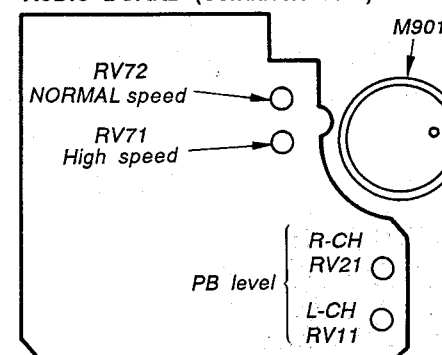
(See right for Adjusting Parts Location)

• Adjusting Parts Location

TC MAIN BOARD (Conductor Side)



AUDIO BOARD (Conductor Side)

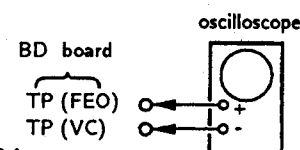


CD SECTION

Note :

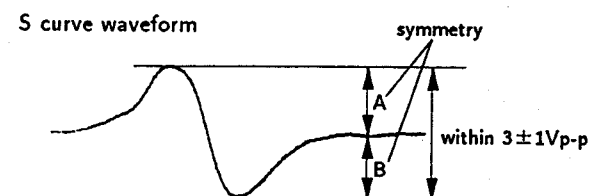
1. CD Block basically constructed to operate without adjustment. Therefore, check each item in order given.
2. Use YEDS-18 disc (3-702-101-01) unless otherwise indicated.
3. Use the oscilloscope with more than $10M\Omega$ impedance.
4. Clean an object lens by an applicator with neutral detergent when the signal level is low than specified value with the following checks.

S Curve Check



Procedure :

1. Connect oscilloscope to test point TP (FEO) on BD board.
2. Connect between test point TP (FES) and TP (VC) by lead wire.
3. Turned Power switch on and actuate the focus serch. (actuate the focus serch when disc table is moving in and out.)
4. Check the oscilloscope waveform (S curve) is symmetrical between A and B. And confirm peak to peak level within $3\pm 1V_{p-p}$.

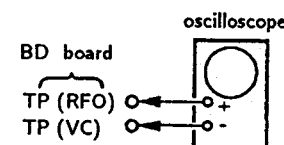


5. After check, remove the lead wire connected in step 2.

Note : • Try to measure several times to make sure that the ratio of A : B or B : A is more than 10 : 7.

• Take sweep time as long as possible and light up the brightness to obtain best waveform.

RF Level Check

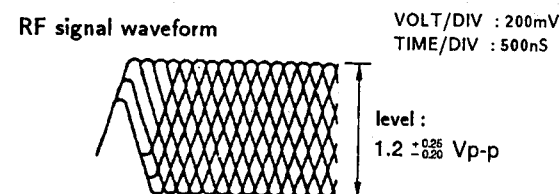


Procedure :

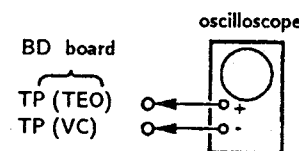
1. Connect oscilloscope to test point TP (RFO) on BD board.
2. Turn Power switch on.
3. Put disc (YEDS-18) in and playback.
4. Confirm that oscilloscope waveform is clear and check RF signal level is correct or not.

Note :

Clear RF signal waveform means that the shape "◇" can be clearly distinguished at the center of the waveform.

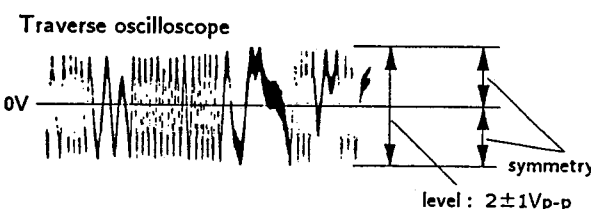


E-F Balance Check



Procedure :

1. Connect test point TP (ADJ) to ground and TP (TES) to TP (VC) with lead wire.
2. Connect oscilloscope to test point TP (TEO) on BD board.
3. Turn Power switch on.
4. Put disc (YEDS-18) in and playback.
5. Confirm that the oscilloscope waveform is symmetrical on the top and bottom in relation to 0V, and check this level.

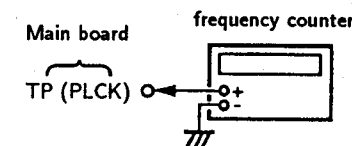


6. Remove the lead wire connected in step 1.

RF PLL Free-run Frequency Check

Procedure :

1. Connect frequency counter to test point (PLCK) with lead wire.



2. Turn Power switch on.
3. Confirm that reading on frequency counter is 4. 3218MHz.

Focus/Tracking Gain

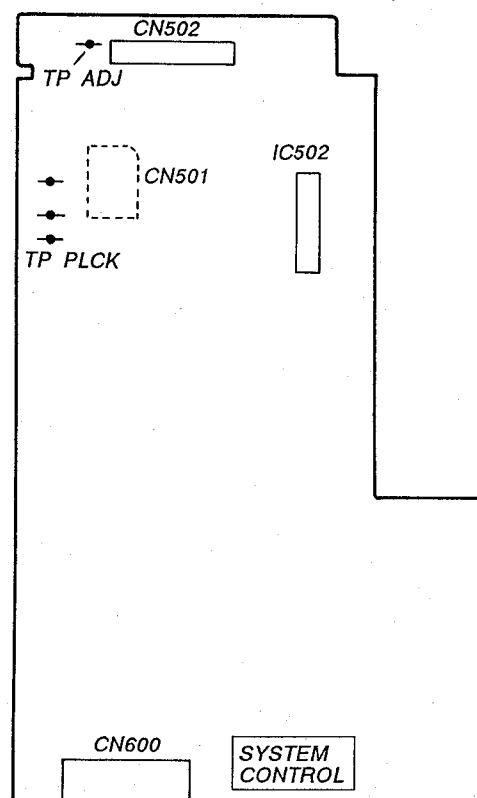
This gain has a margin, so even if it is slightly off. There is no problem.

Therefore, do not perform, this adjustment.

Please note that it should be fixed to mechanical center position when you moved and do not know original position.

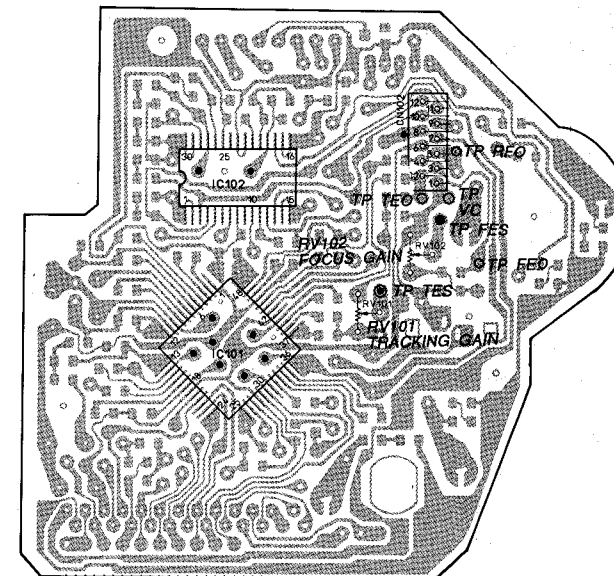
Adjustment Location ;

CD MAIN BOARD (Component Side)



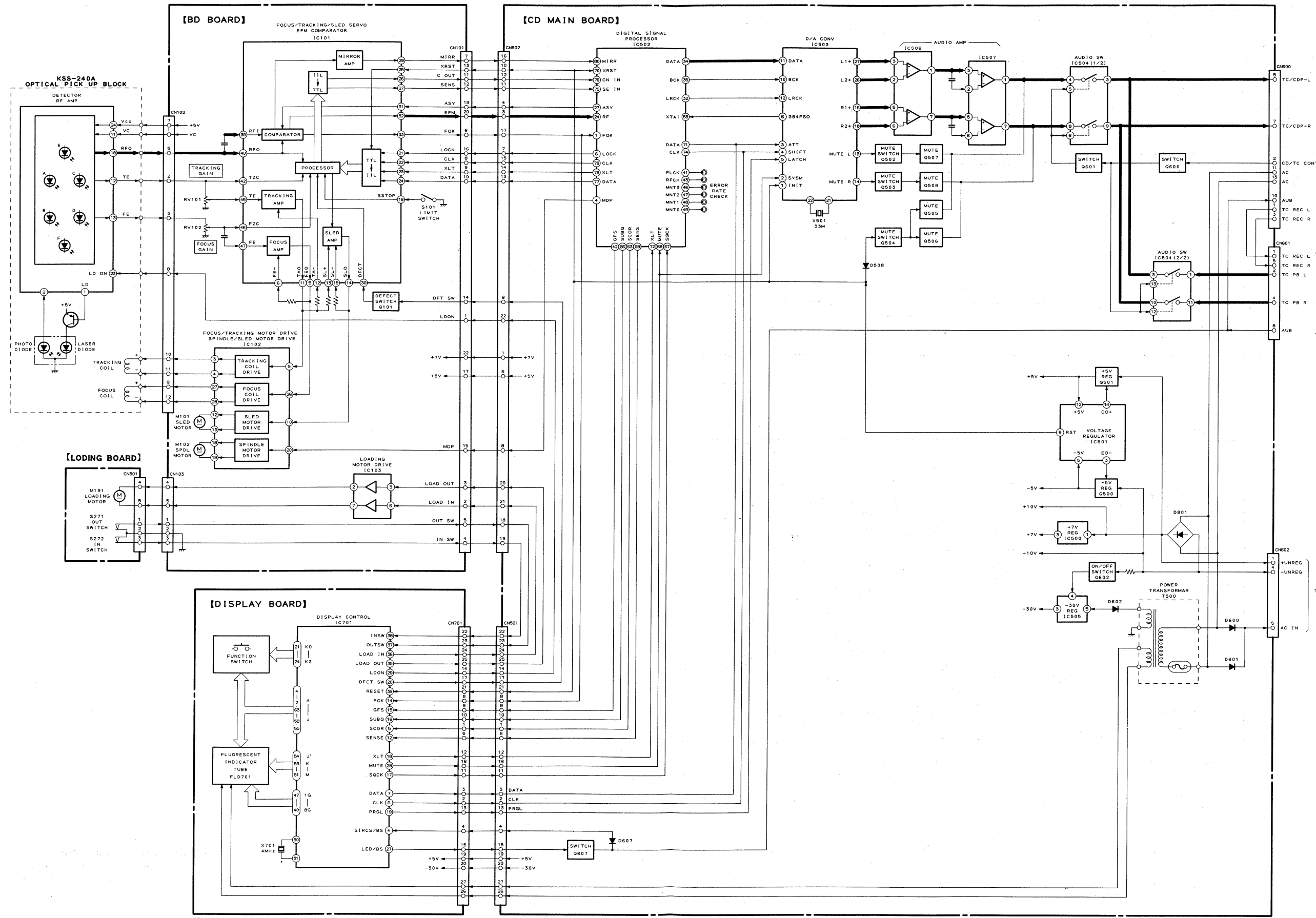
Adjustment Locations : [BD board]

— conductor side —



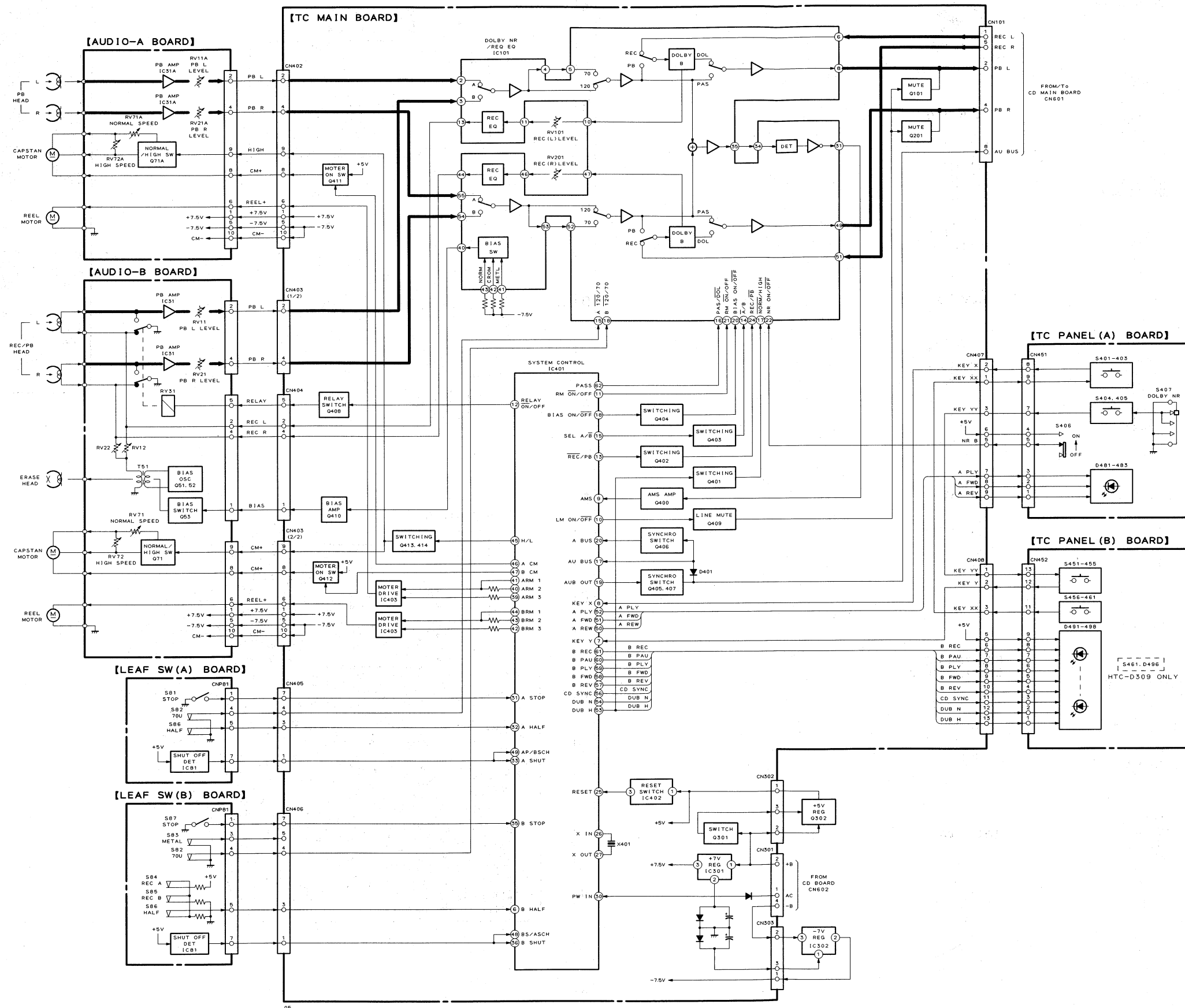
SECTION 3 DIAGRAMS

3-1. CD SECTION BLOCK DIAGRAM



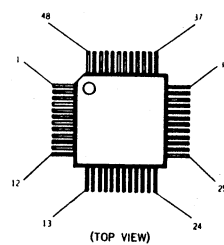
3-2. CASSE

3-2. CASSETTE DECK SECTION BLOCK DIAGRAM

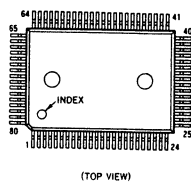


• Semiconductor Lead Layouts

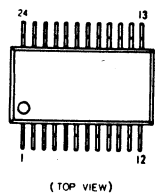
CXA1372AQ



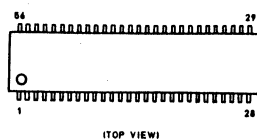
CXD2500BQ



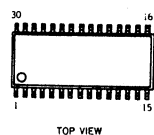
CXD2565M



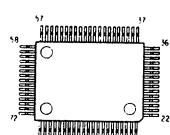
HA12171NT



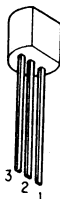
LA6532M



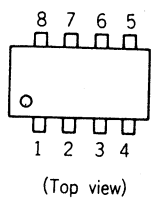
M50964-256FP



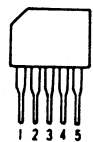
M51943BSL



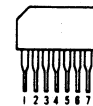
M5218AP



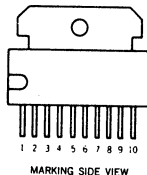
M5293L



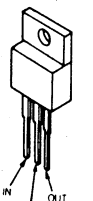
M54641L



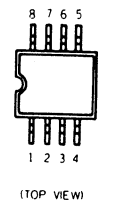
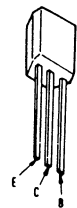
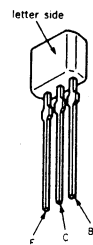
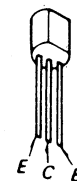
TA7272P



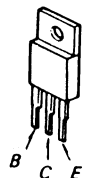
TA7807S



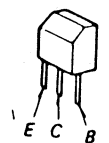
PC4570G2

DTA144ES
DTC144ES2SA1175-HFE
2SC2785-HFE
2SC3623A-LK2SB1013-4
2SD1616A-K

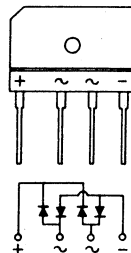
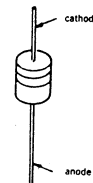
2SB1094-LK



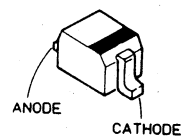
2SD774-34



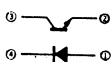
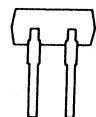
D2SB20

HZS9A2L
UZL-6L3
UZL-7L2
UZL-9H1
11ES2
11EQS04

MA110



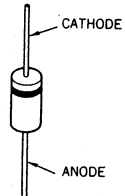
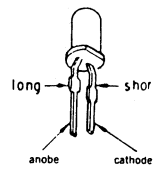
NJL5165K-B



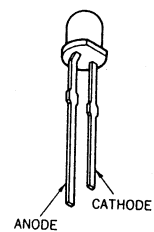
UZM4.7X



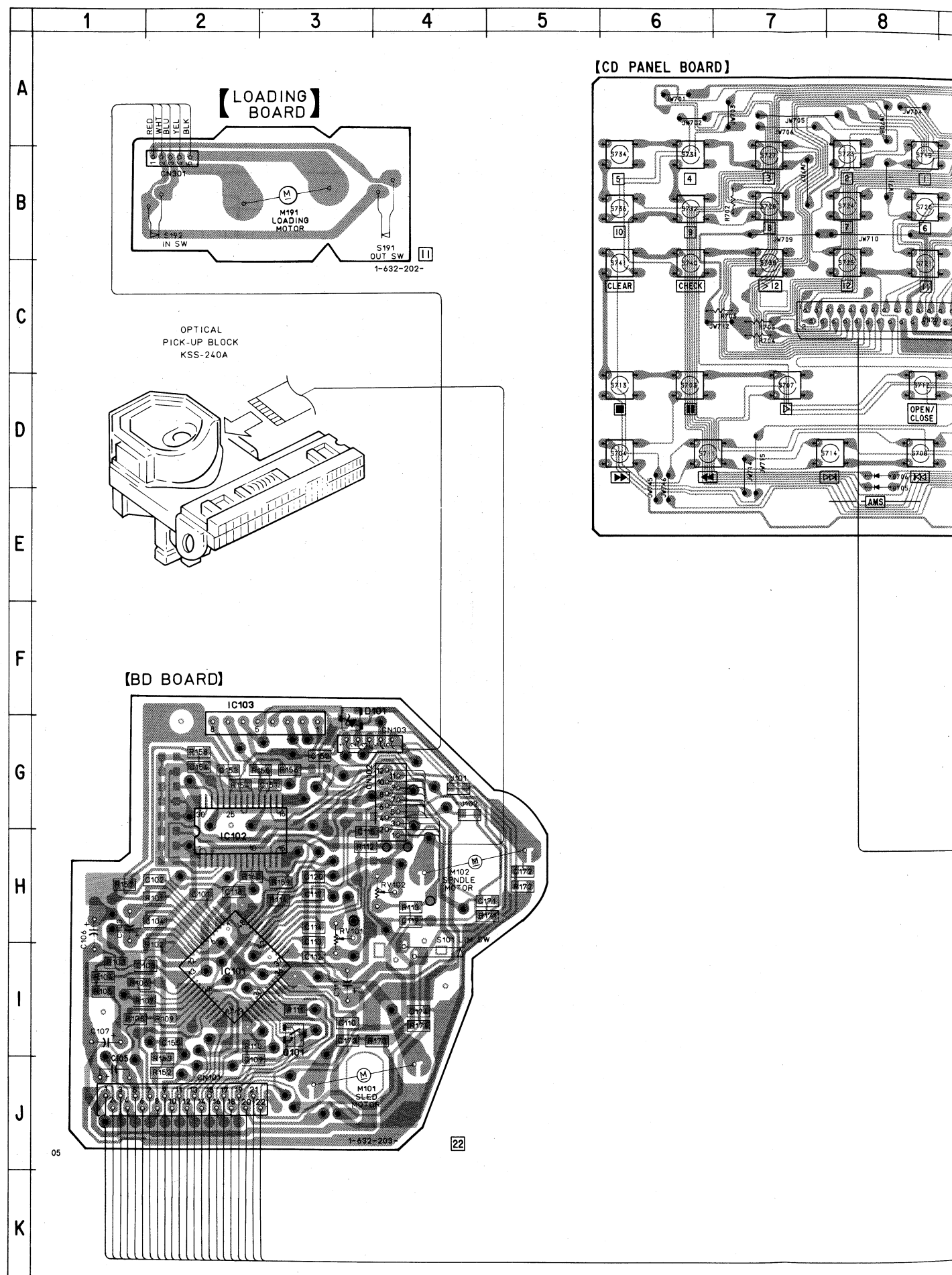
1N4148M

SEL2210S-CD
SEL2410E-TH10

SEL2810A



3-3. CD SECTION PRINTED WIRING BOARDS





【CD MAIN BOARD】



- ○ — : parts extracted from the component side.
- ■■■■ : Pattern from the side which enables seeing.
- ▨▨▨▨ : Pattern of the rear side.

3-4. CD SECTION SCHEMATIC DIAGRAM

Semiconductor Location

Ref. No.	Location
D101	G-3
D504	H-16
D505	H-16
D506	H-16
D507	F-14
D508	G-15
D600	K-18
D601	K-18
D602	K-16
D603	J-15
D607	I-13
D608	H-16
D701	B-15
D702	B-15
D703	B-15
D704	B-15
D705	E-8
D706	D-8
D707	B-11
D708	D-9
D709	D-9
D710	D-9
D711	D-9
D712	B-11
D801	I-18
IC101	I-2
IC102	H-2
IC103	G-2
IC500	H-17
IC501	I-16
IC502	G-11
IC503	G-13
IC504	G-16
IC505	K-16
IC506	H-13
IC507	H-14
IC701	B-13
Q101	I-3
Q500	J-16
Q501	H-17
Q502	G-14
Q503	G-14
Q504	G-15
Q505	H-15
Q506	H-15
Q507	H-15
Q508	H-15
Q600	F-16
Q601	F-16
Q602	J-16
Q605	I-14

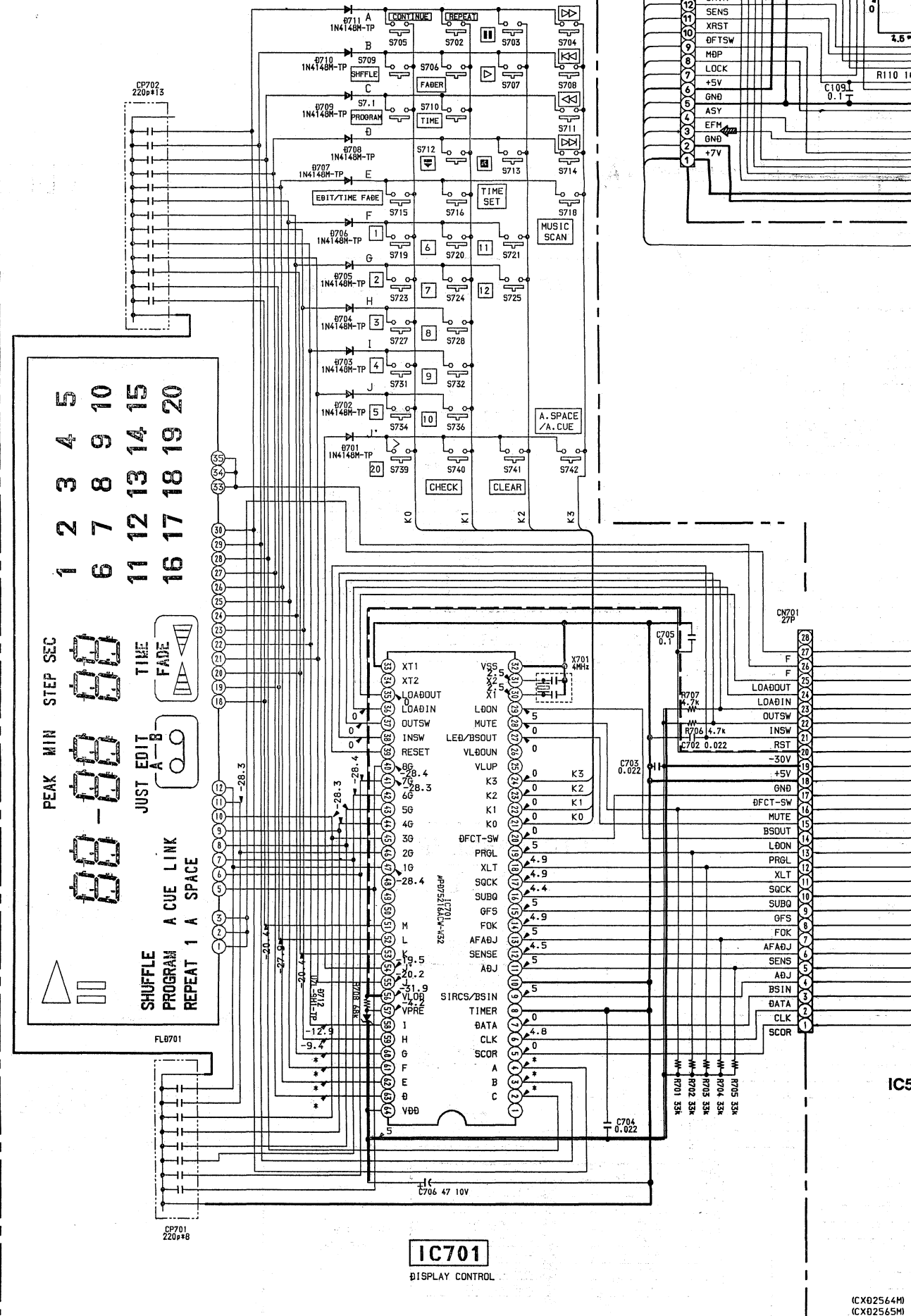
Note on Schematic Diagram:

- All capacitors are in μF unless otherwise noted. pF: μF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and $\frac{1}{4}$ W or less unless otherwise specified.

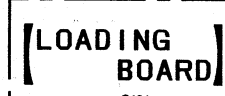
Note: The components identified by mark Δ or dotted line with mark Δ are critical for safety. Replace only with part number specified.

- : B + Line.
- - - : B - Line.
- : adjustment for repair.
- Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.
- no mark : CD PLAY (COMMON)
- () : DECK A PB
- << >> : DECK B PB
- Voltages are taken with a VOM (10 M Ω /V).
- Voltage variations may be noted due to normal production tolerances.
- Signal path.
- ⊞ : CD
- : PB (DECK B)
- ⊞ : REC (DECK B)

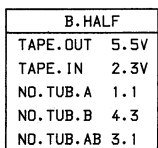
[CD PANEL BOARD]

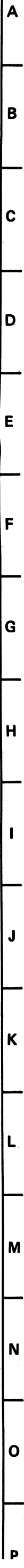


[BD BOARD]

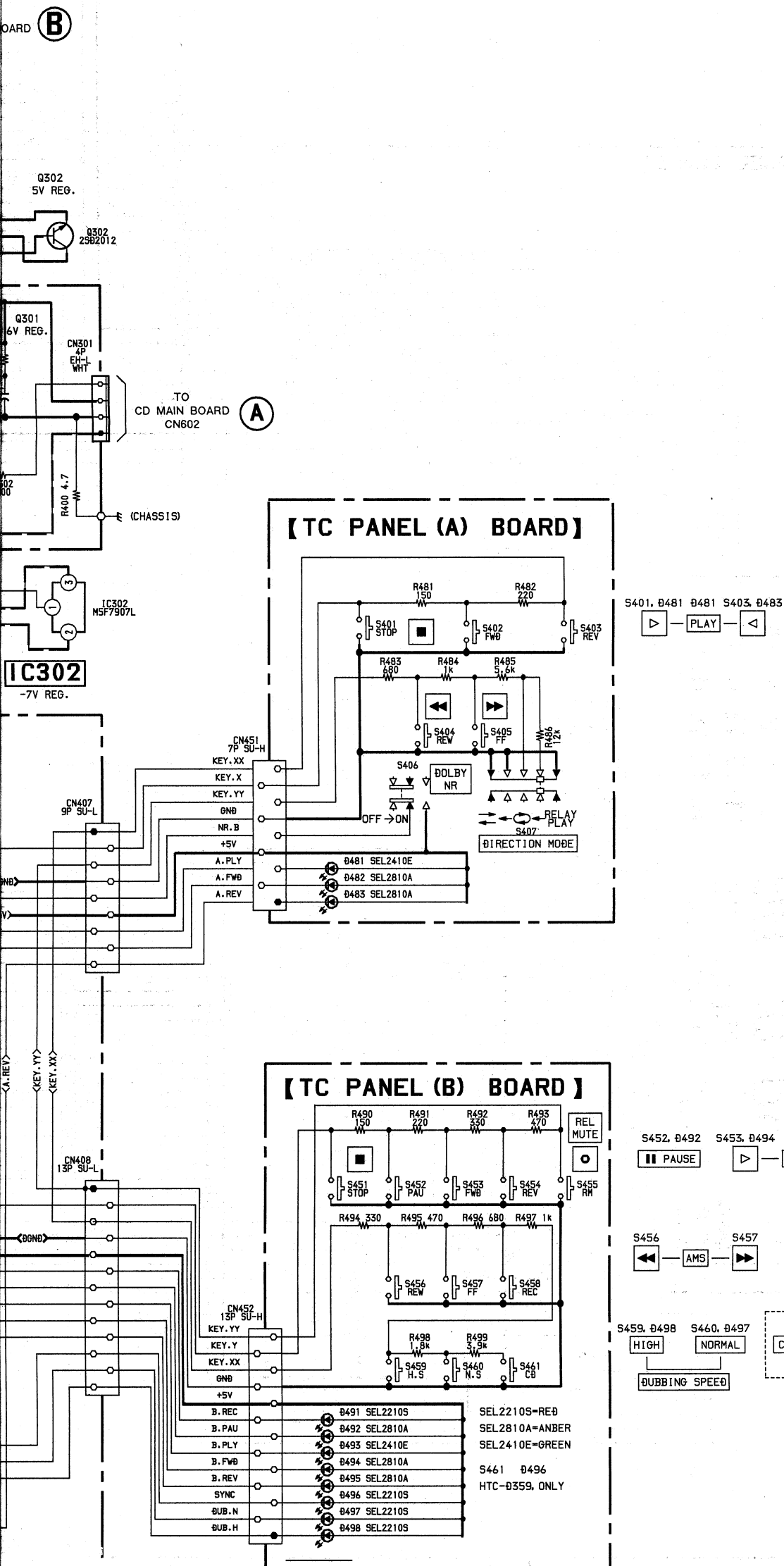















23	24	25	26	27	28	29
----	----	----	----	----	----	----



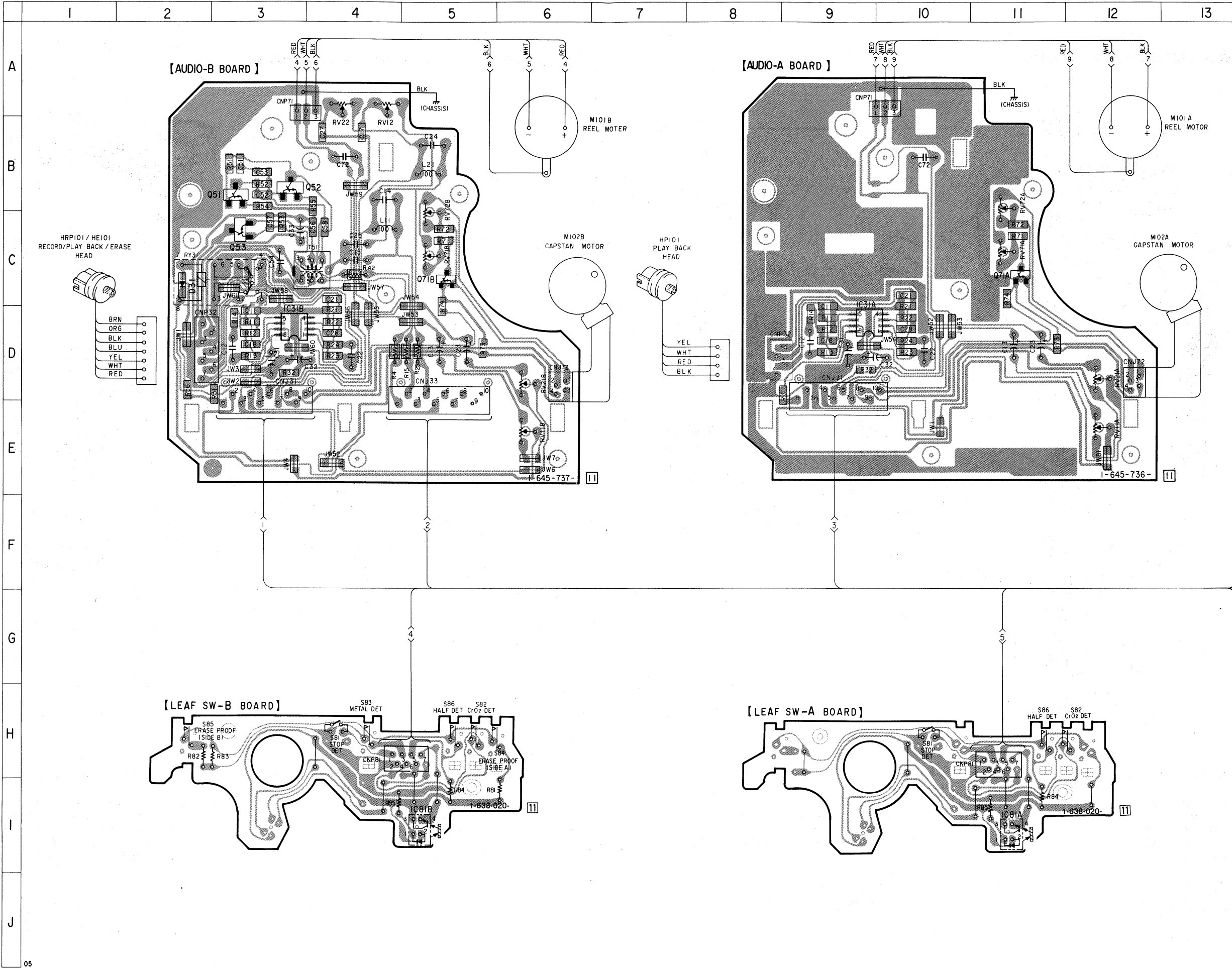
Note on Schematic Diagram:

- All capacitors are in μF unless otherwise noted. pF: μF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and $\frac{1}{4}$ W or less unless otherwise specified.

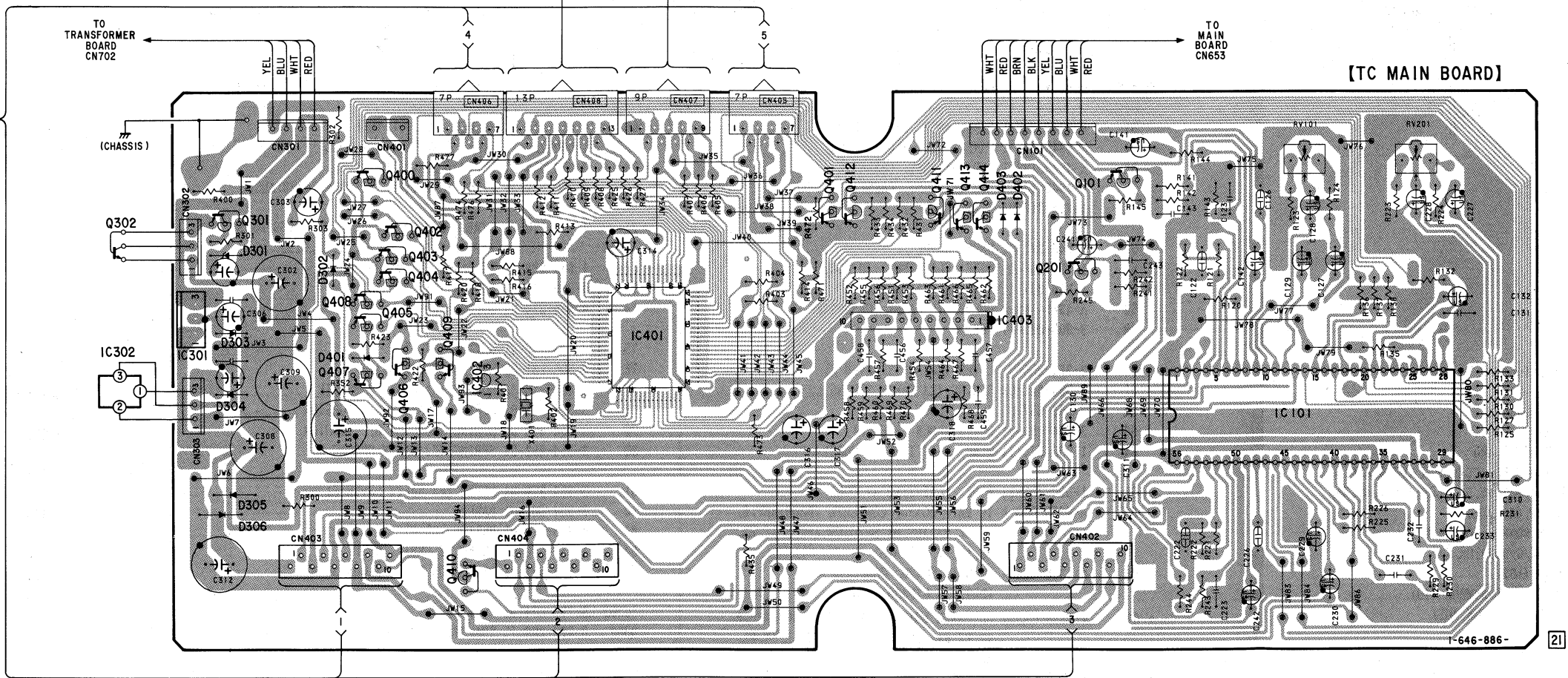
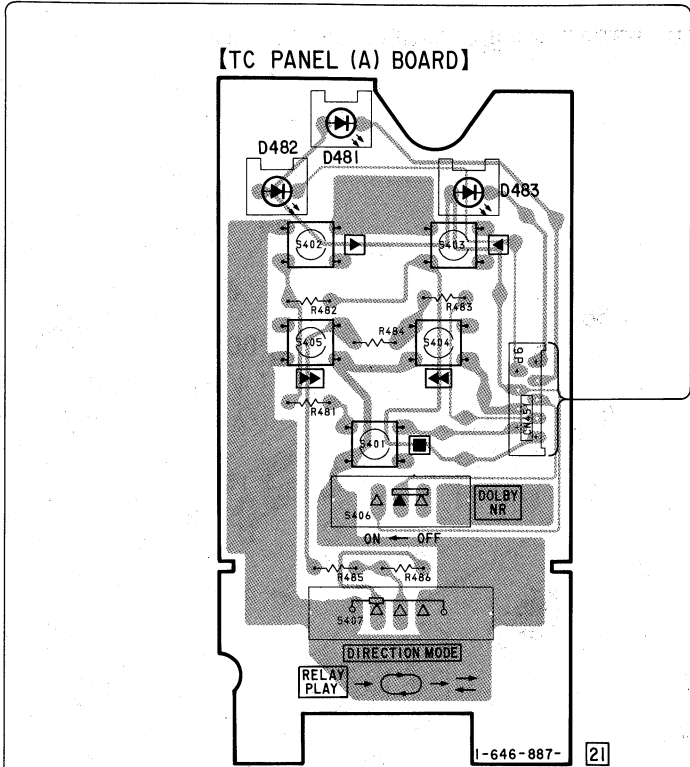
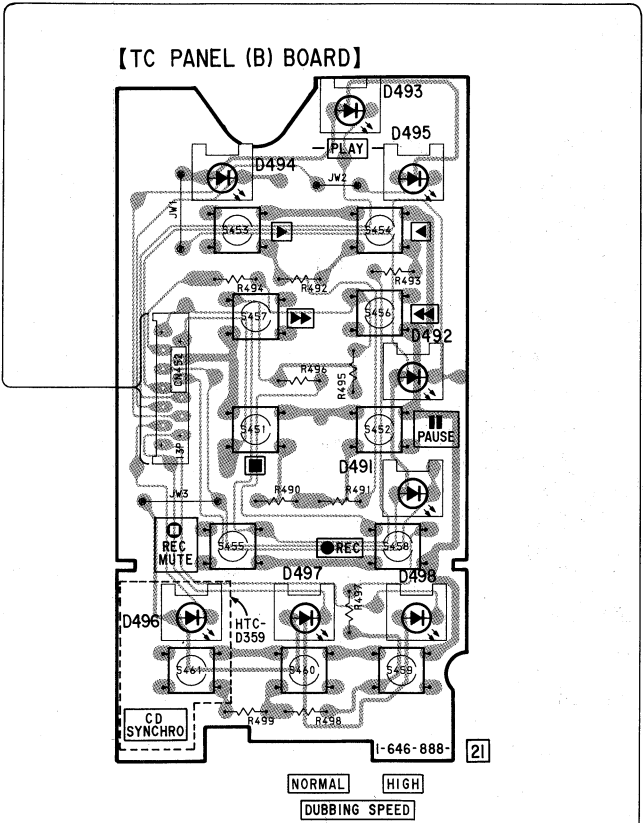
Note: The components identified by mark  or dotted line with mark are critical for safety.
Replace only with part number specified.

-  : B + Line.
-  : B - Line.
-  : adjustment for repair.
- Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.
no mark : REC (COMMON)
() : DECK A PB
◀ ▶ : DECK B PB
- Voltages are taken with a VOM (10 MΩ/V).
Voltage variations may be noted due to normal production tolerances.
- Signal path.
 : CD
 : PB (DECK B)
 : REC (DECK B)

3-6. CASSETTE DECK SECTION PRINTED WIRING BOARDS
• See page 13 for Semiconductor Lead Layouts.



14 15 16 17 18 19 20 21 22 23 24



● Semiconductor Location

Ref. No.	Location
D31	C-2
D301	G-15
D302	H-16
D303	H-15
D304	H-15
D305	I-15
D306	I-15
D401	H-16
D402	G-21
D403	G-20
D481	A-20
D482	B-19
D483	B-21
D491	C-16
D492	C-16
D493	A-16
D494	B-15
D495	B-16
D496	D-15
D497	D-16
D498	D-16
IC31A	D-9
IC31B	D-3
IC101	I-22
IC301	H-15
IC302	H-14
IC401	H-18
IC402	H-17
IC403	H-20
Q51	B-3
Q52	B-3
Q53	C-3
Q71A	C-11
Q71B	C-5
Q101	G-21
Q201	H-21
Q301	G-15
Q302	G-14
Q400	G-16
Q401	G-19
Q402	G-16
Q403	G-16
Q404	H-16
Q405	H-16
Q406	H-16
Q407	H-16
Q408	H-16
Q409	H-16
Q410	J-17
Q411	G-20
Q412	G-19
Q413	G-20
Q414	G-20

Note on Printed Wiring Board:
● ○ : parts extracted from the component side.

SECTION 4
EXPLODED VIEWS

NOTE:

- -XX and -X mean standardized parts, so they may have some difference from the original one.

- Color Indication of Appearance Parts
Example:
KNOB, BALANCE (WHITE) ... (RED)

Parts Color Cabinet's Color

- Abbreviations
AUS: Australian Model IT: Italian Model
EA: Saudi Arabia Model MY: Malaysia Model
EE: East European Model SP: Singapore Model
G: Germany Model

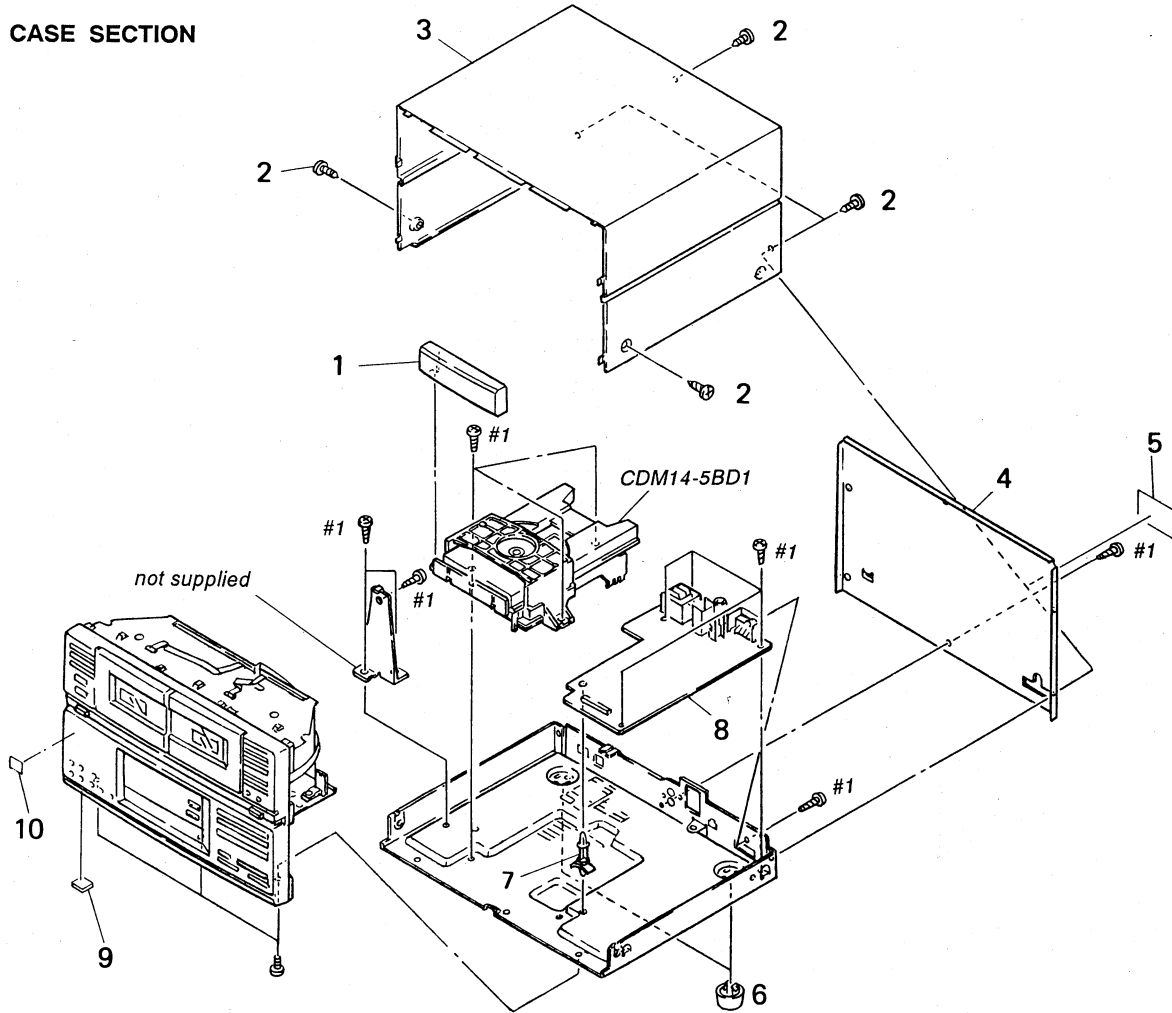
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

- The mechanical parts with no reference number in the exploded views are not supplied.

- Hardware (# mark) list is given in the last of this parts list.

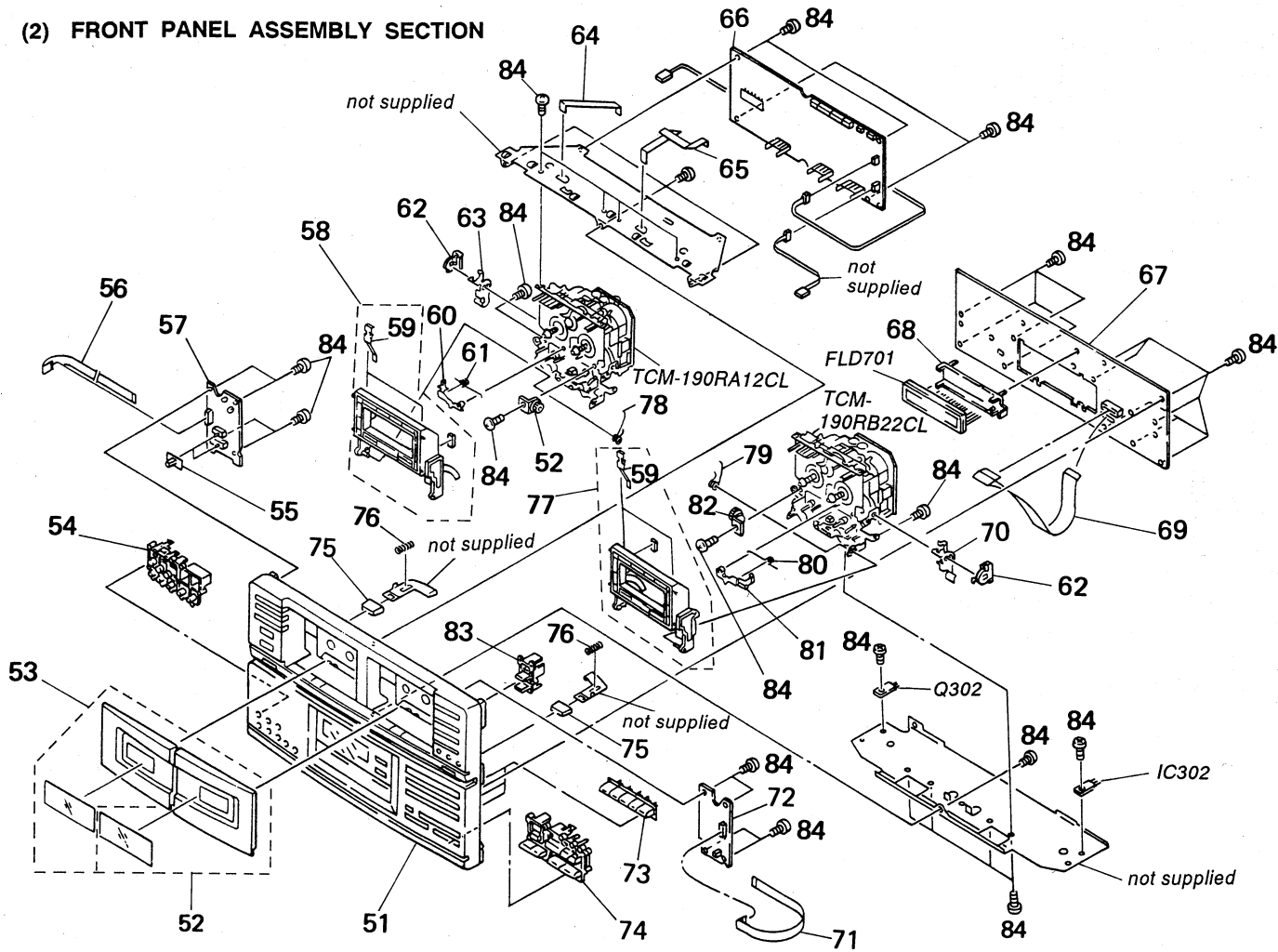
The components identified by mark Δ or dotted line with mark Δ are critical for safety.
Replace only with part number specified.

(1) CASE SECTION



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
1	4-955-815-01	PANEL, LOADING		* 5	4-941-548-01	LABEL, CLASS 1	
2	3-363-099-01	SCREW (CASE 3 TP2) (D209:AUS/D309:UK, AUS)		6	X-4941-228-1	FOOT ASSY	
2	3-704-366-01	SCREW (CASE) (M3X8) (D209:AEP, UK, E, G, IT, EE, EA, MY, SP/D309:AEP, E, IT, G, EA, EE, MY, SP, CIS)		7	4-943-687-01	HOLDER, PC BOARD	
* 3	4-955-759-31	CASE		* 8	A-4356-652-A	CD MAIN BOARD, COMPLETE (D209:AEP, E, IT, EE, EA, AUS, MY, SP/D309:AEP, E, IT, EA, EE, MY, SP, CIS, AUS)	
* 4	4-955-819-01	PANEL, BACK (D209:AEP, UK, G, IT)		* 8	A-4356-661-A	CD MAIN BOARD, COMPLETE (D209:UK, G/D309:UK, G)	
* 4	4-955-819-11	PANEL, BACK (D209:E, EE, MY, SP)		9	4-948-236-01	CUSHION (107)	
* 4	4-955-819-21	PANEL, BACK (D209:EA, AUS)		* 10	3-703-713-41	STICKER, SONY SYMBOL (10) (D209:AUS/D309:UK, AUS)	
* 4	4-955-819-31	PANEL, BACK (D309:AEP, UK, G, IT)					
* 4	4-955-819-41	PANEL, BACK (D309:E, EE, MY, SP, CIS)					
* 4	4-955-819-51	PANEL, BACK (D309:EA, AUS)					

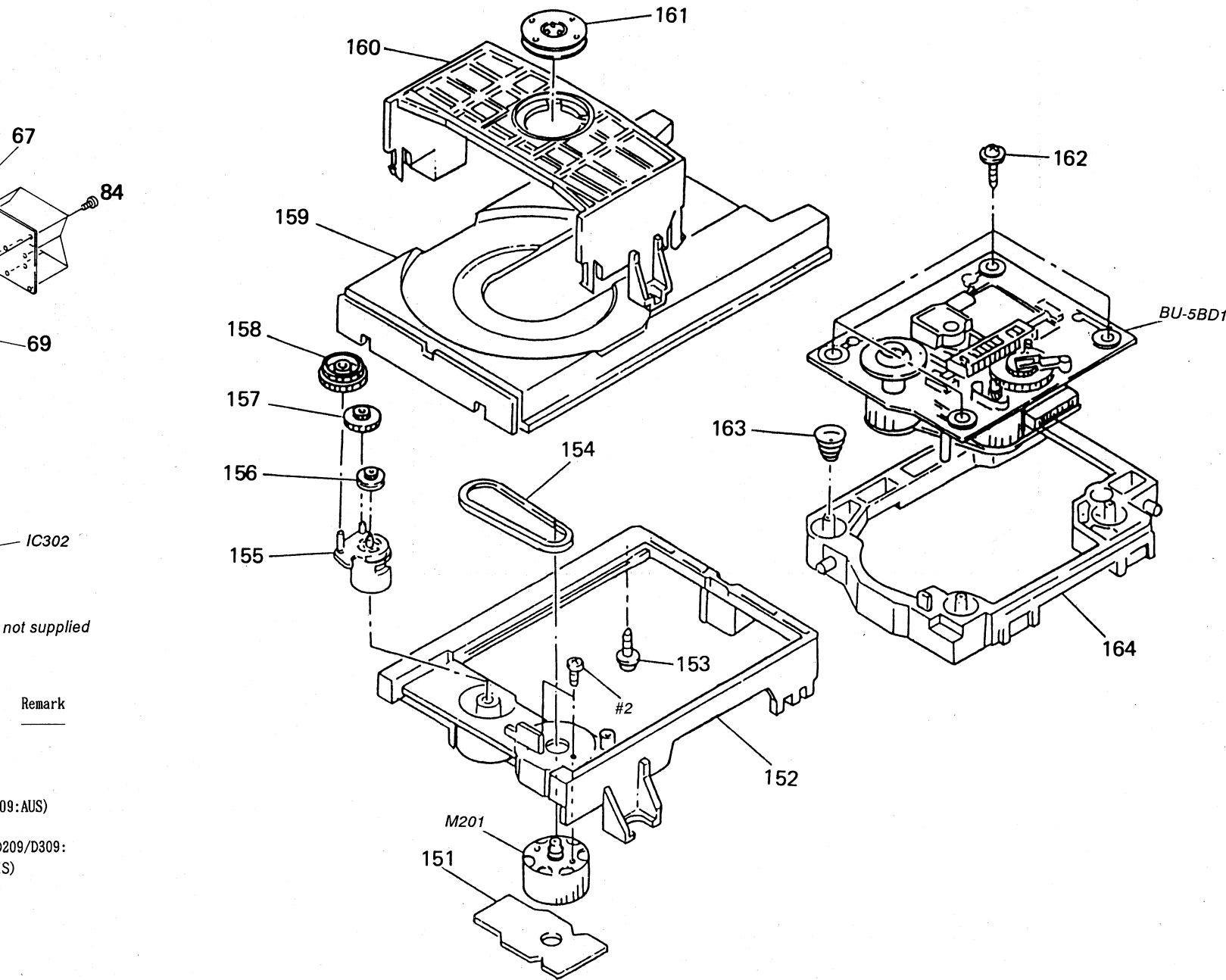
(2) FRONT PANEL ASSEMBLY SECTION



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
51	X-4943-189-1	PANEL ASSY, FRONT (D209)		* 68	4-955-816-01	HOLDER (IF), FL TUBE	
51	X-4943-470-1	PANEL ASSY, FRONT (D309)		69	1-690-729-11	WIRE, FLAT TYPE (27 CORE)	
52	X-4943-197-1	LID (B) ASSY, CASSETTE		* 70	3-354-954-01	LEVER (LOCK LEVER R)	
53	X-4943-196-1	LID (A) ASSY, CASSETTE		71	1-690-589-31	WIRE, FLAT TYPE (13 CORE) (D309:AUS)	
54	4-955-812-01	BUTTON (CD-A)		71	1-751-210-11	WIRE (FLAT TYPE) (13 CORE) (D209/D309: AEP, UK, E, G, IT, EE, EA, MY, SP, CIS)	
55	4-948-273-01	KNOB, SLIDE		* 72	1-646-888-11	TC PANEL (B) BOARD	
56	1-751-209-11	WIRE (FLAT TYPE) (9 CORE)		73	4-955-741-01	BUTTON (PR)	
* 57	1-646-887-11	TC PANEL (A) BOARD		74	4-955-814-01	BUTTON (CD-C)	
58	A-4325-163-A	HOLDER (L) ASSY, CASSETTE		75	4-935-355-41	BUTTON (EJECT)	
59	3-308-823-11	SPRING		76	3-500-131-00	SPRING, COMPRESSION	
60	3-354-955-01	LEVER (EJ SAFTY LEVER L)		77	A-4325-164-A	HOLDER (R) ASSY, CASSETTE	
61	3-354-961-01	SPRING (EJ SAFTY SPRING L)		78	3-354-959-01	SPRING (LOADING L), TORSION	
62	3-354-957-01	JOINT (LOCK LEVER)		79	3-354-960-01	SPRING (LOADING R), TORSION	
* 63	3-354-953-01	LEVER (LOCK LEVER L)		80	3-354-962-01	SPRING (EJ SAFTY SPRING R)	
64	1-590-574-11	WIRE, FLAT TYPE (7 CORE)		81	3-354-956-01	LEVER (EJ SAFTY LEVER R)	
65	1-590-485-11	WIRE, FLAT TYPE (7 CORE)		82	3-354-963-01	DAMPER	
* 66	A-4356-643-A	TC MAIN BOARD, COMPLETE (D209:AEP, E, IT, EE, EA, AUS, MY, SP/D309:AEP, E, IT, EA, EE, MY, SP, CIS, AUS)		83	4-955-813-01	BUTTON (CD-B)	
* 66	A-4356-654-A	TC MAIN BOARD, COMPLETE (D209:UK, G/D309:UK, G)		84	4-951-620-01	SCREW (2.6X8), +BVTP	
* 67	A-4356-653-A	CD PANEL BOARD, COMPLETE (D209:AEP, E, IT, EE, EA, AUS, MY, SP/D309:AEP, E, IT, EA, EE, MY, SP, CIS, AUS)		FLD701	1-519-681-21	INDICATOR TUBE, FLUORESCENT	
* 67	A-4356-662-A	CD PANEL BOARD, COMPLETE (D209:UK, G/D309:UK, G)		IC302	8-759-604-95	IC M5F79M07	
				Q302	8-729-209-15	TRANSISTOR 2SD2012	

(3) CD M

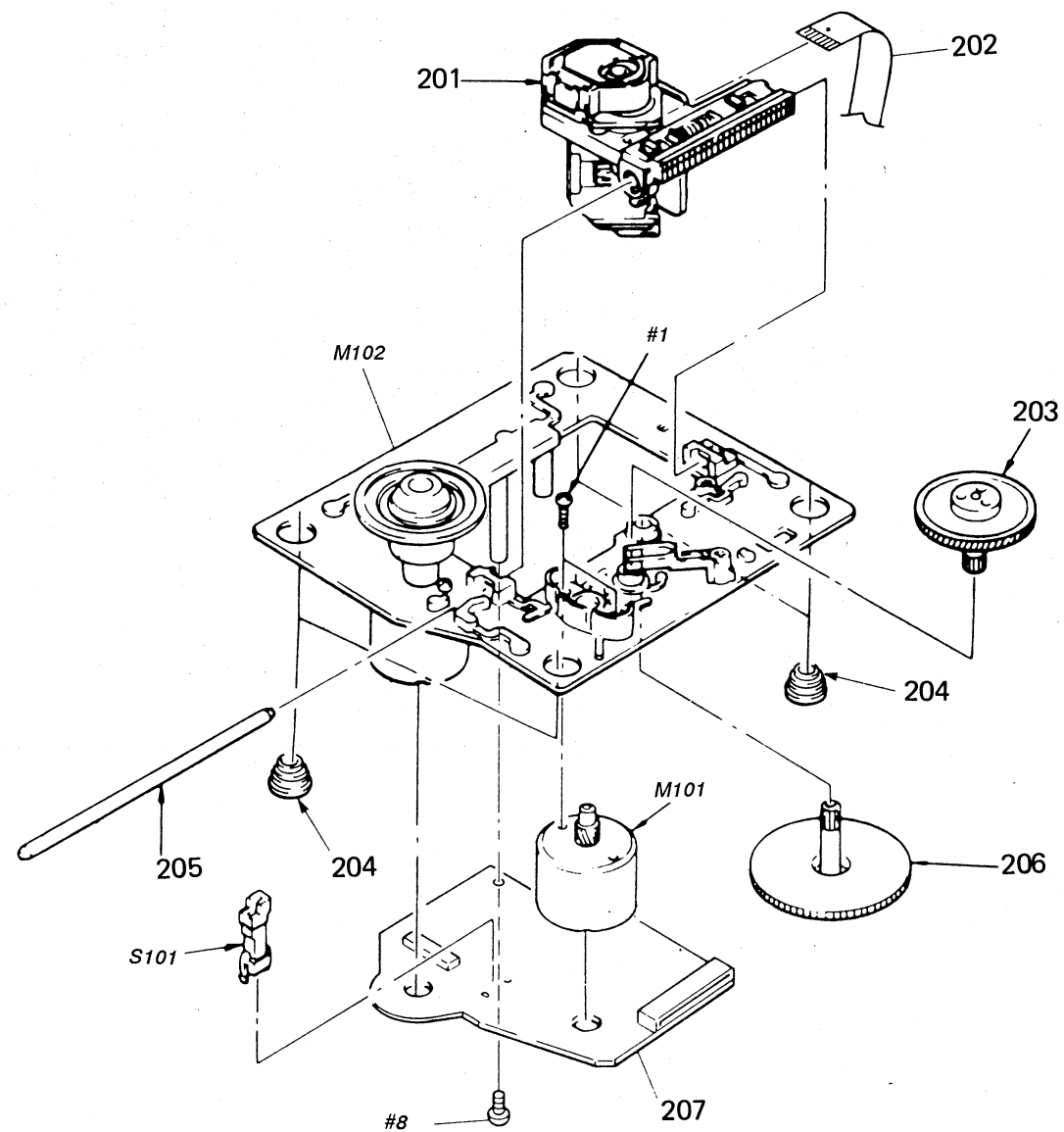
(3) CD MECHANISM SECTION (CDM14-5BD1)



Ref. No.	Part No.	Description	Remark
* 151	1-632-202-11	LOADING BOARD	
152	4-933-111-01	CHASSIS (MD)	
* 153	4-917-583-21	BRACKET, YOKE	
154	4-927-649-01	BELT	
155	4-933-109-01	CAM	
156	4-927-651-01	PULLEY (S)	
157	4-927-628-01	GEAR (C)	
158	4-933-107-01	GEAR (PL)	

Ref. No.	Part No.	Description	Remark
159	4-933-112-01	TABLE, DISK	
160	4-933-110-01	HOLDER (MG)	
* 161	1-452-538-11	MAGNET	
162	4-933-134-01	SCREW (+PTPH M2. 6X6)	
163	4-917-541-01	SPRING (B)	
164	4-933-129-01	HOLDER (BU)	
M201	A-4604-363-A	MOTOR (L) ASSY	

(4) OPTICAL PICK-UP BLOCK ASSEMBLY (BU-5BD1)

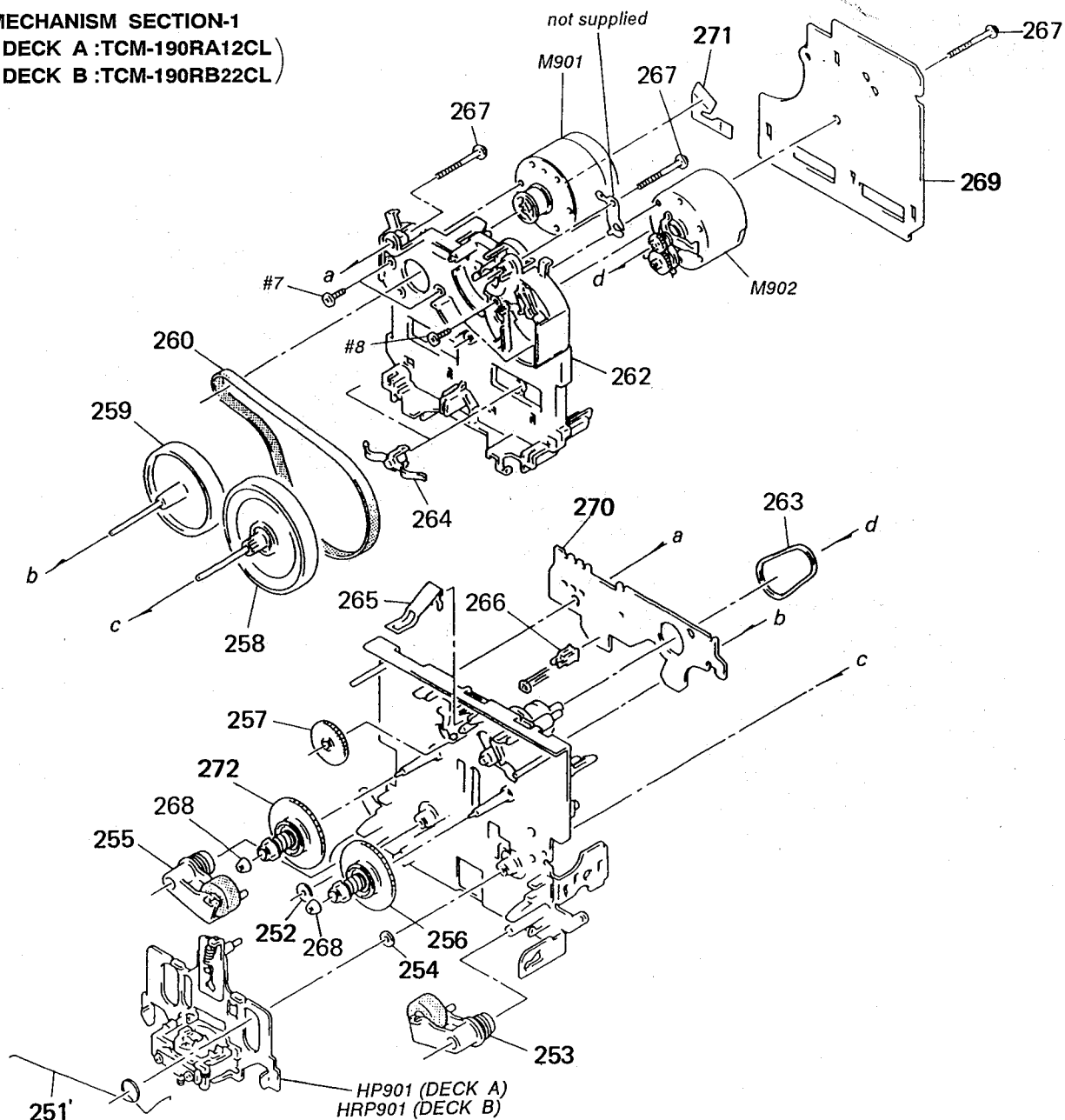


Ref. No.	Part No.	Description	Remark
Δ 201	8-848-144-11	DEVICE, OPTICAL KSS-240A	
202	1-575-001-11	WIRE, FLAT TYPE (12 CORE)	
203	4-917-567-01	GEAR (M)	
204	4-933-126-01	INSULATOR (A)	
205	4-917-565-01	SHAFT, SLED	

Ref. No.	Part No.	Description	Remark
206	4-917-564-01	GEAR (P), FLATNESS	
* 207	A-4617-371-A	BD BOARD, COMPLETE	
S101	1-572-085-11	SWITCH, LEAF (LIMIT IN)	
M101	X-4917-504-1	MOTOR ASSY (SLED)	
M102	X-4917-523-3	BASE (OUTSERT) ASSY (SPINDLE MOTOR)	

Note: The components identified by mark Δ or dotted line with mark Δ are critical for safety. Replace only with part number specified.

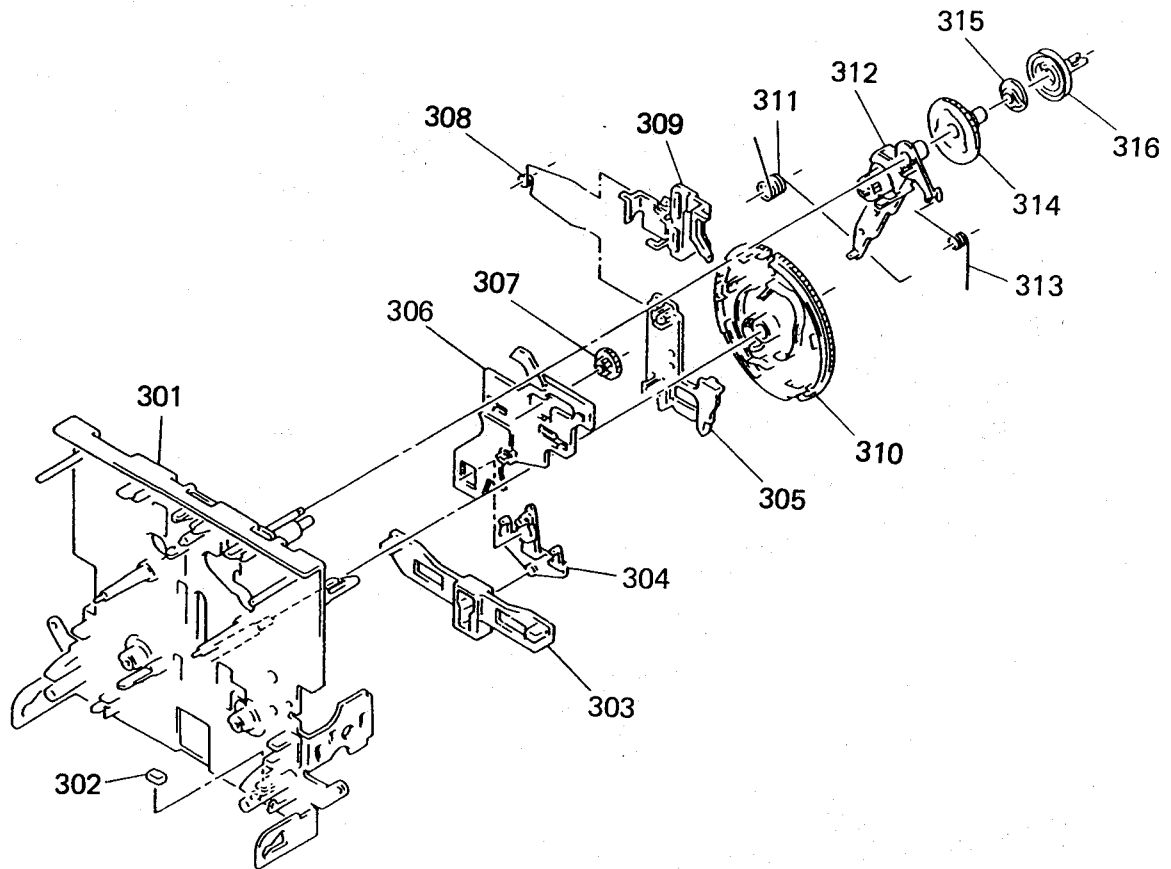
(5) MECHANISM SECTION-1
(DECK A :TCM-190RA12CL)
(DECK B :TCM-190RB22CL)



Ref. No.	Part No.	Description	Remark
251	3-359-455-01	SPRING, TORSION	
252	3-356-714-01	WASHER	
253	X-3359-408-1	LEVER (PINCH LEVER FWD) ASSY	
254	3-356-713-01	WASHER	
255	X-3359-409-1	LEVER (PINCH LEVER REV) ASSY	
256	X-3359-404-1	TABLE ASSY, REEL	
257	3-359-424-01	GEAR (REV GEAR)	
258	X-3359-406-1	FLYWHEEL (FWD) ASSY	
259	X-3359-410-1	FLYWHEEL (REV) ASSY	
260	3-359-417-01	BELT (FLAT), CAPSTAN	
* 262	3-359-436-01	BASE (THRUST RETAINER), FITTING	
263	3-359-466-01	BELT (FR), SQUARE	
264	3-575-321-00	RETAINER, THRUST, CAPSTAN	

Ref. No.	Part No.	Description	Remark
265	3-359-430-01	SPRING (CASSETTE RETAINER), LEAF	
266	3-343-419-01	HOLDER (S SENSOR A)	
267	3-359-414-01	SCREW (+PTPWH 2X23)	
268	3-362-308-01	CAP (REEL)	
* 269	A-2006-609-A	AUDIO BOARD, COMPLETE (DECK A)	
* 269	A-2006-610-A	AUDIO BOARD, COMPLETE (DECK B)	
* 270	1-638-020-11	LEAF SW BOARD	
271	1-638-983-11	PC BOARD, MOTOR FLEXIBLE	
272	X-3362-078-1	TABLE ASSY (B), REEL	
HP901	A-2003-838-A	DECK ASSY, HEAD (DECK A)	
HRPE901A	2004-190-A	DECK ASSY, HEAD (DECK B)	
M901	X-3359-417-1	MOTOR ASSY (CAPSTAN)	
M902	X-3363-501-1	MOTOR ASSY (REEL)	

(6) MECHANISM SECTION-2
(DECK A :TCM-190RA12CL)
(DECK B :TCM-190RB22CL)



Ref. No.	Part No.	Description	Remark
301	X-3359-415-1	CHASSIS ASSY, MECHANICAL	
302	3-359-469-01	SPACER	
* 303	3-359-425-01	SLIDER (REVERSE SLIDER)	
304	3-359-426-01	LEVER (REVERSE LEVER)	
* 305	3-359-427-01	SLIDER (LEVERSE SLIDER)	
* 306	3-359-415-01	SLIDER (TRIGGER SLIDER)	
307	3-359-448-01	GEAR (TRIGGER)	
308	3-359-454-01	SPRING, TORSION	

Ref. No.	Part No.	Description	Remark
309	3-359-429-01	SLIDER (BRAKE PLATE)	
310	3-359-420-01	GEAR (CAM GEAR)	
311	3-359-456-01	SPRING (TRIGGER SPRING), TORSION	
312	X-3359-405-1	LEVER (FR ARM) ASSY	
313	3-359-453-01	SPRING (FR ARM), TORSION	
314	3-359-419-01	GEAR (FR GEAR)	
315	3-359-421-01	CLUTCH (REEL DISK)	
316	3-359-418-01	PULLEY (FR PULLEY)	

SECTION 5 ELECTRICAL PARTS LIST

AUDIO-A

AUDIO-B

NOTE:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- XX and -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
All resistors are in ohms.
METAL: Metal-film resistor.
METAL OXIDE: Metal oxide-film resistor.
F: nonflammable

- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

SEMICONDUCTORS

In each case, u: μ , for example:

uA...: μ A... uPA...: μ PA...

uPB...: μ PB... uPC...: μ PC... uPD...: μ PD...

CAPACITORS

uF: μ F

COILS

uH: μ H

Abbreviations

AUS: Australian Model

IT: Italian Model

EA: Saudi Arabia Model

MY: Malaysia Model

EE: East European Model

SP: Singapore Model

G: Germany Model

The components identified by mark Δ or dotted line with mark Δ are critical for safety. Replace only with part number specified.

Les composants identifiés par une marque Δ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

When indicating parts by reference number, please include the board.

Ref. No.	Part No.	Description	Remark
*	A-2006-623-A	AUDIO-A BOARD, COMPLETE *****	
		< CAPACITOR >	
C11	1-163-131-00	CERAMIC CHIP 390PF	5% 50V
C12	1-136-157-00	FILM 0.022uF	5% 50V
C13	1-124-234-00	ELECT 22uF	20% 16V
C18	1-163-117-00	CERAMIC CHIP 100PF	5% 50V
C21	1-163-131-00	CERAMIC CHIP 390PF	5% 50V
C22	1-136-157-00	FILM 0.022uF	5% 50V
C23	1-124-234-00	ELECT 22uF	20% 16V
C28	1-163-117-00	CERAMIC CHIP 100PF	5% 50V
C31	1-124-234-00	ELECT 22uF	20% 16V
C32	1-124-234-00	ELECT 22uF	20% 16V
C72	1-124-499-11	ELECT, NONPOLAR 1uF	20% 50V
		< JACK >	
* CNJ31	1-580-782-11	CONNECTOR, BOARD TO BOARD	
* CNJ72	1-580-411-11	SOCKET, CONNECTOR 4P	
		< CONNECTOR >	
* CNP32	1-580-772-11	PIN, CONNECTOR (PC BOARD) 4P	
* CNP71	1-564-719-11	PIN, CONNECTOR (SMALL TYPE) 3P	
		< IC >	
IC31	8-759-106-02	IC uPC4570G2	
		< JUMPER RESISTOR >	
JW1	1-216-295-00	METAL CHIP 0 5%	1/10W
JW51	1-216-296-00	METAL CHIP 0 5%	1/8W
JW52	1-216-296-00	METAL CHIP 0 5%	1/8W
JW53	1-216-296-00	METAL CHIP 0 5%	1/8W
JW54	1-216-296-00	METAL CHIP 0 5%	1/8W

Ref. No.	Part No.	Description	Remark
		< TRANSISTOR >	
Q71	8-729-216-22	TRANSISTOR 2SA1162-G	
		< RESISTOR >	
R11	1-216-099-00	METAL CHIP 120K 5%	1/10W
R12	1-216-025-00	METAL CHIP 100 5%	1/10W
R13	1-216-100-00	METAL GLAZE 130K 5%	1/10W
R14	1-216-067-00	METAL CHIP 5.6K 5%	1/10W
R21	1-216-099-00	METAL CHIP 120K 5%	1/10W
R22	1-216-025-00	METAL CHIP 100 5%	1/10W
R23	1-216-100-00	METAL GLAZE 130K 5%	1/10W
R24	1-216-067-00	METAL CHIP 5.6K 5%	1/10W
R31	1-216-033-00	METAL CHIP 220 5%	1/10W
R32	1-216-033-00	METAL CHIP 220 5%	1/10W
R71	1-216-082-00	METAL GLAZE 24K 5%	1/10W
R72	1-216-081-00	METAL CHIP 22K 5%	1/10W
R73	1-216-089-00	METAL CHIP 47K 5%	1/10W
R74	1-216-089-00	METAL CHIP 47K 5%	1/10W
		< VARIABLE RESISTOR >	
RV11	1-238-012-11	RES, ADJ, CARBON 1K	
RV21	1-238-012-11	RES, ADJ, CARBON 1K	
RV71	1-238-016-11	RES, ADJ, CARBON 10K	
RV72	1-238-016-11	RES, ADJ, CARBON 10K	

*	A-2006-624-A	AUDIO-B BOARD, COMPLETE *****	
		< CAPACITOR >	
C11	1-163-131-00	CERAMIC CHIP 390PF	5% 50V
C12	1-136-157-00	FILM 0.022uF	5% 50V
C13	1-124-234-00	ELECT 22uF	20% 16V
C14	1-136-273-91	FILM 75PF	5% 630V
C15	1-164-080-11	CERAMIC 390PF	10% 50V

AUDIO-B

Ref. No.	Part No.	Description	Remark
C17	1-163-103-00	CERAMIC CHIP 27PF	5% 50V
C18	1-163-117-00	CERAMIC CHIP 100PF	5% 50V
C21	1-163-131-00	CERAMIC CHIP 390PF	5% 50V
C22	1-136-157-00	FILM 0.022uF	5% 50V
C23	1-124-234-00	ELECT 22uF	20% 16V
C24	1-136-273-91	FILM 75PF	5% 630V
C25	1-164-080-11	CERAMIC 390PF	10% 50V
C27	1-163-103-00	CERAMIC CHIP 27PF	5% 50V
C28	1-163-117-00	CERAMIC CHIP 100PF	5% 50V
C31	1-124-234-00	ELECT 22uF	20% 16V
C32	1-124-234-00	ELECT 22uF	20% 16V
C33	1-124-234-00	ELECT 22uF	20% 16V
C51	1-163-019-00	CERAMIC CHIP 0.0068uF	10% 50V
C52	1-163-019-00	CERAMIC CHIP 0.0068uF	10% 50V
C53	1-163-022-00	CERAMIC CHIP 0.012uF	10% 50V
C54	1-136-559-11	FILM 0.0047uF	5% 630V
C56	1-164-505-11	CERAMIC CHIP 2.2uF	16V
C57	1-164-346-11	CERAMIC CHIP 1uF	16V
C58	1-163-024-00	CERAMIC CHIP 0.018uF	10% 50V
C72	1-124-499-11	ELECT, NONPOLAR 1uF	20% 50V

< JACK >

- * CNJ31 1-580-782-11 CONNECTOR, BOARD TO BOARD
- * CNJ33 1-580-782-11 CONNECTOR, BOARD TO BOARD
- * CNJ72 1-580-411-11 SOCKET, CONNECTOR 4P

< CONNECTOR >

- * CNP32 1-580-781-11 PIN, CONNECTOR (PC BOARD) 7P
- * CNP71 1-564-719-11 PIN, CONNECTOR (SMALL TYPE) 3P

< DIODE >

D31 8-719-404-46 DIODE MA110

< IC >

IC31 8-759-106-02 IC uPC4570G2

< JUMPER RESISTOR >

JW1	1-216-296-00	METAL CHIP	0	5%	1/8W
JW2	1-216-295-00	METAL CHIP	0	5%	1/10W
JW3	1-216-295-00	METAL CHIP	0	5%	1/10W
JW4	1-216-295-00	METAL CHIP	0	5%	1/10W
JW6	1-216-295-00	METAL CHIP	0	5%	1/10W
JW7	1-216-295-00	METAL CHIP	0	5%	1/10W
JW52	1-216-296-00	METAL CHIP	0	5%	1/8W
JW53	1-216-296-00	METAL CHIP	0	5%	1/8W
JW54	1-216-296-00	METAL CHIP	0	5%	1/8W
JW55	1-216-296-00	METAL CHIP	0	5%	1/8W

Ref. No.	Part No.	Description	Remark
JW56	1-216-296-00	METAL CHIP	0 5% 1/8W
JW57	1-216-296-00	METAL CHIP	0 5% 1/8W
JW58	1-216-296-00	METAL CHIP	0 5% 1/8W
JW59	1-216-296-00	METAL CHIP	0 5% 1/8W
JW60	1-216-296-00	METAL CHIP	0 5% 1/8W
JW61	1-216-296-00	METAL CHIP	0 5% 1/8W
JW62	1-216-296-00	METAL CHIP	0 5% 1/8W
JW63	1-216-296-00	METAL CHIP	0 5% 1/8W

< COIL >

L11	1-410-780-11	INDUCTOR 27mH
L21	1-410-780-11	INDUCTOR 27mH

< TRANSISTOR >

Q51	8-729-111-29	TRANSISTOR 2SD1616A-K
Q52	8-729-111-29	TRANSISTOR 2SD1616A-K
Q53	8-729-111-29	TRANSISTOR 2SD1616A-K
Q71	8-729-216-22	TRANSISTOR 2SA1162-G

< RESISTOR >

R11	1-216-099-00	METAL CHIP	120K	5%	1/10W
R12	1-216-025-00	METAL CHIP	100	5%	1/10W
R13	1-216-100-00	METAL GLAZE	130K	5%	1/10W
R14	1-216-067-00	METAL CHIP	5.6K	5%	1/10W
R15	1-249-430-11	CARBON	12K	5%	1/4W
R21	1-216-099-00	METAL CHIP	120K	5%	1/10W
R22	1-216-025-00	METAL CHIP	100	5%	1/10W
R23	1-216-100-00	METAL GLAZE	130K	5%	1/10W
R24	1-216-067-00	METAL CHIP	5.6K	5%	1/10W
R25	1-249-430-11	CARBON	12K	5%	1/4W
R31	1-216-033-00	METAL CHIP	220	5%	1/10W
R32	1-216-033-00	METAL CHIP	220	5%	1/10W
R41	1-249-393-11	CARBON	10	5%	1/4W F
R42	1-249-393-11	CARBON	10	5%	1/4W F
R51	1-216-075-00	METAL CHIP	12K	5%	1/10W
R52	1-216-075-00	METAL CHIP	12K	5%	1/10W
R53	1-216-073-00	METAL CHIP	10K	5%	1/10W
R54	1-216-309-00	METAL CHIP	5.6	5%	1/10W
R55	1-216-309-00	METAL CHIP	5.6	5%	1/10W
R56	1-216-298-00	METAL CHIP	2.2	5%	1/10W
R71	1-216-082-00	METAL GLAZE	24K	5%	1/10W
R72	1-216-081-00	METAL CHIP	22K	5%	1/10W
R73	1-216-089-00	METAL CHIP	47K	5%	1/10W
R74	1-216-089-00	METAL CHIP	47K	5%	1/10W

< VARIABLE RESISTOR >

RV11	1-238-012-11	RES, ADJ, CARBON 1K
RV12	1-238-551-11	RES, ADJ, CARBON 220K
RV21	1-238-012-11	RES, ADJ, CARBON 1K

Ref. No.	Part No.	Description	Remark
RV22	1-238-551-11	RES, ADJ, CARBON 220K	
RV71	1-238-016-11	RES, ADJ, CARBON 10K	
RV72	1-238-016-11	RES, ADJ, CARBON 10K	
< RELAY >			
RY31	1-515-726-11	RELAY	
< TRANSFORMER >			
T51	1-406-419-11	COIL, BIAS OSCILLATION	

A-4617-161-A BD BOARD, COMPLETE			

< CAPACITOR >			
C101	1-163-038-00	CERAMIC CHIP 0.1uF	25V
C102	1-163-989-11	CERAMIC CHIP 0.033uF	10% 25V
C103	1-126-163-11	ELECT 4.7uF	20% 50V
C104	1-163-038-00	CERAMIC CHIP 0.1uF	25V
C105	1-126-154-11	ELECT 47uF	20% 6.3V
C106	1-126-154-11	ELECT 47uF	20% 6.3V
C107	1-126-154-11	ELECT 47uF	20% 6.3V
C108	1-163-038-00	CERAMIC CHIP 0.1uF	25V
C109	1-163-038-00	CERAMIC CHIP 0.1uF	25V
C110	1-163-989-11	CERAMIC CHIP 0.033uF	10% 25V
C111	1-131-367-00	TANTALUM 22uF	10% 20V
C112	1-164-232-11	CERAMIC CHIP 0.01uF	50V
C113	1-164-232-11	CERAMIC CHIP 0.01uF	50V
C114	1-164-161-11	CERAMIC CHIP 0.0022uF	10% 100V
C115	1-164-161-11	CERAMIC CHIP 0.0022uF	10% 100V
C117	1-163-038-00	CERAMIC CHIP 0.1uF	25V
C118	1-163-038-00	CERAMIC CHIP 0.1uF	25V
C119	1-164-161-11	CERAMIC CHIP 0.0022uF	10% 100V
C120	1-163-989-11	CERAMIC CHIP 0.033uF	10% 25V
C151	1-163-019-00	CERAMIC CHIP 0.0068uF	10% 50V
C152	1-163-038-00	CERAMIC CHIP 0.1uF	25V
C153	1-163-006-11	CERAMIC CHIP 560PF	10% 50V
C154	1-164-161-11	CERAMIC CHIP 0.0022uF	10% 100V
C155	1-163-023-00	CERAMIC CHIP 0.015uF	5% 50V
C171	1-163-038-00	CERAMIC CHIP 0.1uF	25V
C172	1-163-038-00	CERAMIC CHIP 0.1uF	25V
C173	1-163-038-00	CERAMIC CHIP 0.1uF	25V
C174	1-163-038-00	CERAMIC CHIP 0.1uF	25V
< CONNECTOR >			
CN101	1-568-796-11	SOCKET, CONNECTOR 22P	
CN102	1-568-795-11	SOCKET, CONNECTOR 12P	
CN103	1-564-721-11	PIN, CONNECTOR (SMALL TYPE) 5P	

Ref. No.	Part No.	Description	Remark
< DIODE >			
D101	8-719-021-25	DIODE UZM4.7X	
< IC >			
IC101	8-752-058-77	IC CXA1372AQ	
IC102	8-759-822-36	IC LA6532M	
IC103	8-759-633-65	IC M54641L	
< JACK >			
J101	1-216-295-00	METAL CHIP 0 5% 1/10W	
J102	1-216-295-00	METAL CHIP 0 5% 1/10W	
< MOTOR >			
M101	X-4917-504-1	MOTOR ASSY (SLED)	
< TRANSISTOR >			
Q101	8-729-901-01	TRANSISTOR DTC144EK	
< RESISTOR >			
R101	1-216-097-00	METAL CHIP 100K 5% 1/10W	
R102	1-216-095-00	METAL CHIP 82K 5% 1/10W	
R103	1-216-091-00	METAL CHIP 56K 5% 1/10W	
R104	1-216-099-00	METAL CHIP 120K 5% 1/10W	
R105	1-216-069-00	METAL CHIP 6.8K 5% 1/10W	
R106	1-216-061-00	METAL CHIP 3.3K 5% 1/10W	
R107	1-216-114-00	METAL GLAZE 510K 5% 1/10W	
R108	1-216-105-00	METAL CHIP 220K 5% 1/10W	
R109	1-216-061-00	METAL CHIP 3.3K 5% 1/10W	
R110	1-216-049-00	METAL CHIP 1K 5% 1/10W	
R111	1-216-049-00	METAL CHIP 1K 5% 1/10W	
R112	1-216-083-00	METAL CHIP 27K 5% 1/10W	
R113	1-216-071-00	METAL CHIP 8.2K 5% 1/10W	
R114	1-216-105-00	METAL CHIP 220K 5% 1/10W	
R152	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R153	1-216-085-00	METAL CHIP 33K 5% 1/10W	
R154	1-216-085-00	METAL CHIP 33K 5% 1/10W	
R155	1-216-093-00	METAL CHIP 68K 5% 1/10W	
R156	1-216-081-00	METAL CHIP 22K 5% 1/10W	
R157	1-216-079-00	METAL CHIP 18K 5% 1/10W	
R158	1-216-079-00	METAL CHIP 18K 5% 1/10W	
R159	1-216-079-00	METAL CHIP 18K 5% 1/10W	
R160	1-216-049-00	METAL CHIP 1K 5% 1/10W	
R171	1-216-001-00	METAL CHIP 10 5% 1/10W	
R172	1-216-001-00	METAL CHIP 10 5% 1/10W	
R173	1-216-001-00	METAL CHIP 10 5% 1/10W	
R174	1-216-001-00	METAL CHIP 10 5% 1/10W	
< VARIABLE RESISTOR >			
RV101	1-238-016-11	RES, ADJ, CARBON 10K	
RV102	1-238-016-11	RES, ADJ, CARBON 10K	

CD MAIN

Ref. No.	Part No.	Description	Remark
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< SWITCH >

S101	1-572-085-11	SWITCH, LEAF (LIMIT)	
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*	A-4356-652-A	CD MAIN BOARD, COMPLETE (D209:AEP, E, IT, EE, EA, AUS, MY, SP/D309:AEP, E, IT, EA, EE, MY, SP, CIS, AUS)	
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*	A-4356-661-A	CD MAIN BOARD, COMPLETE (D209:UK, G/D309:UK, G)	
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7-685-646-79	SCREW +BVTP 3X8 TYPE2 N-S		
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< CAPACITOR >

C500	1-124-564-11	ELECT	4700uF	20%	25V
C501	1-126-946-11	ELECT	6800uF	20%	25V
C502	1-126-176-11	ELECT	220uF	20%	10V
C503	1-124-907-11	ELECT	10uF	20%	50V
C504	1-124-903-11	ELECT	1uF	20%	50V

C505	1-124-907-11	ELECT	10uF	20%	50V
C506	1-124-472-11	ELECT	470uF	20%	10V
C507	1-164-159-11	CERAMIC	0.1uF		50V
C508	1-124-472-11	ELECT	470uF	20%	10V
C509	1-164-159-11	CERAMIC	0.1uF		50V

C510	1-136-165-00	FILM	0.1uF	5%	50V
C511	1-136-165-00	FILM	0.1uF	5%	50V
C512	1-124-443-00	ELECT	100uF	20%	10V
C513	1-164-159-11	CERAMIC	0.1uF		50V
C515	1-136-161-00	FILM	0.047uF	5%	50V

C516	1-161-374-11	CERAMIC	0.0015uF	20%	50V
C517	1-124-443-00	ELECT	100uF	20%	10V
C518	1-124-902-00	ELECT	0.47uF	20%	50V
C519	1-136-153-00	FILM	0.01uF	5%	50V
C520	1-124-443-00	ELECT	100uF	20%	10V

C521	1-136-165-00	FILM	0.1uF	5%	50V
C522	1-124-472-11	ELECT	470uF	20%	10V
C524	1-126-176-11	ELECT	220uF	20%	10V
C525	1-164-159-11	CERAMIC	0.1uF		50V
C526	1-124-443-00	ELECT	100uF	20%	10V

C527	1-161-494-00	CERAMIC	0.022uF		25V
C528	1-162-196-31	CERAMIC	5.6PF	10%	50V
C529	1-162-196-31	CERAMIC	5.6PF	10%	50V
C530	1-124-443-00	ELECT	100uF	20%	10V
C531	1-161-494-00	CERAMIC	0.022uF		25V

C532	1-162-283-31	CERAMIC	120PF	10%	50V
C533	1-162-283-31	CERAMIC	120PF	10%	50V
C534	1-110-335-11	MYLAR	100PF	5%	50V
C534	1-137-358-91	FILM	0.0001uF	5%	50V
C535	1-110-335-11	MYLAR	100PF	5%	50V

Ref. No.	Part No.	Description	Remark
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C535	1-137-358-91	FILM	0.0001uF	5%	50V
C536	1-110-335-11	MYLAR	100PF	5%	50V
C536	1-137-358-91	FILM	0.0001uF	5%	50V
C537	1-110-335-11	MYLAR	100PF	5%	50V
C537	1-137-358-91	FILM	0.0001uF	5%	50V

C538	1-164-159-11	CERAMIC	0.1uF		50V
C539	1-164-159-11	CERAMIC	0.1uF		50V
C542	1-130-471-00	MYLAR	0.001uF	5%	50V
C542	1-137-364-11	FILM	0.001uF	5%	50V
C543	1-130-471-00	MYLAR	0.001uF	5%	50V

C543	1-137-364-11	FILM	0.001uF	5%	50V
C544	1-124-907-11	ELECT	10uF	20%	50V
C545	1-124-907-11	ELECT	10uF	20%	50V
C548	1-124-472-11	ELECT	470uF	20%	10V
C549	1-124-443-00	ELECT	100uF	20%	10V

C550	1-124-907-11	ELECT	10uF	20%	50V
C551	1-124-907-11	ELECT	10uF	20%	50V
C552	1-164-159-11	CERAMIC	0.1uF		50V
C553	1-164-159-11	CERAMIC	0.1uF		50V
C554	1-130-480-00	MYLAR	0.0056uF	5%	50V

C554	1-137-437-11	FILM	0.0056uF	5%	50V
C555	1-130-480-00	MYLAR	0.0056uF	5%	50V
C555	1-137-437-11	FILM	0.0056uF	5%	50V
C560	1-164-159-11	CERAMIC	0.1uF		50V
C561	1-164-159-11	CERAMIC	0.1uF		50V

C600	1-162-286-31	CERAMIC	220PF	10%	50V
C601	1-162-294-31	CERAMIC	0.001uF	10%	50V
C602	1-162-286-31	CERAMIC	220PF	10%	50V
C603	1-110-339-11	MYLAR	220PF	5%	50V
C603	1-137-360-91	FILM	220PF	5%	50V

C604	1-110-339-11	MYLAR	220PF	5%	50V
C604	1-137-360-91	FILM	220PF	5%	50V
C605	1-164-159-11	CERAMIC	0.1uF		50V
C607	1-161-494-00	CERAMIC	0.022uF		25V
C608	1-164-159-11	CERAMIC	0.1uF		50V

C609	1-164-159-11	CERAMIC	0.1uF		50V
C610	1-124-572-11	ELECT	100uF	20%	63V
C611	1-164-159-11	CERAMIC	0.1uF		50V
C612	1-124-907-11	ELECT	10uF	20%	50V
C613	1-164-159-11	CERAMIC	0.1uF		50V

C614	1-124-443-00	ELECT	100uF	20%	10V
C615	1-124-472-11	ELECT	470uF	20%	10V
C616	1-164-159-11	CERAMIC	0.1uF		50V
C801	1-162-290-31	CERAMIC	470PF	10%	50V

< CONNECTOR >

* CN501	1-568-842-11	SOCKET, CONNECTOR 27P	
* CN502	1-568-822-11	SOCKET, CONNECTOR 22P	
* CN600	1-565-291-11	SOCKET, CONNECTOR 13P (SYSTEM CONTROL)	

CD MAIN

Ref. No.	Part No.	Description	Remark
* CN601	1-564-511-11	PLUG, CONNECTOR 8P	
< DIODE >			
D504	8-719-000-54	DIODE UZL-6L3	
D505	8-719-987-63	DIODE 1N4148M	
D506	8-719-000-54	DIODE UZL-6L3	
D507	8-719-210-21	DIODE 11EQS04	
D508	8-719-987-63	DIODE 1N4148M	
D600	8-719-200-82	DIODE 11ES2	
D601	8-719-200-82	DIODE 11ES2	
D602	8-719-200-82	DIODE 11ES2	
D603	8-719-933-54	DIODE HZS9A2L	
D607	8-719-987-63	DIODE 1N4148M	
D608	8-719-987-63	DIODE 1N4148M	
D801	8-719-500-36	DIODE D2SB20	
< FERRITE BEAD >			
FB601	1-412-473-21	INDUCTOR OUH	
FB602	1-412-473-21	INDUCTOR OUH	
FB603	1-412-473-51	INDUCTOR OUH	
FB604	1-412-473-21	INDUCTOR OUH	
< IC >			
IC500	8-759-071-48	IC TA7807S	
IC501	8-759-630-21	IC M5290P-16	
IC502	8-752-352-93	IC CXD2500BQ	
IC503	8-752-355-45	IC CXD2565M	
IC504	8-759-000-49	IC MC14066BCP	
IC505	8-759-633-42	IC M5293L	
IC506	8-759-634-51	IC M5218AP	
IC507	8-759-634-51	IC M5218AP	
< COIL >			
L501	1-410-513-11	INDUCTOR 22uH	
< IC LINK >			
PS500	1-532-685-00	LINK, IC	
PS501	1-532-637-00	LINK, IC 1.0A	
< TRANSISTOR >			
Q500	8-729-140-96	TRANSISTOR 2SD774-34	
Q501	8-729-141-83	TRANSISTOR 2SB1094-LK	
Q502	8-729-900-65	TRANSISTOR DTA144ES	
Q503	8-729-900-65	TRANSISTOR DTA144ES	
Q504	8-729-900-65	TRANSISTOR DTA144ES	
Q505	8-729-141-30	TRANSISTOR 2SC3623A-LK	
Q506	8-729-141-30	TRANSISTOR 2SC3623A-LK	
Q507	8-729-119-78	TRANSISTOR 2SC2785-HFE	

Ref. No.	Part No.	Description	Remark
Q508	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q600	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q601	8-729-900-89	TRANSISTOR DTC144ES	
Q602	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q605	8-729-119-78	TRANSISTOR 2SC2785-HFE	
< RESISTOR >			
R500	1-249-425-11	CARBON 4.7K 5%	1/4W F
R501	1-249-425-11	CARBON 4.7K 5%	1/4W F
R502	1-249-423-11	CARBON 3.3K 5%	1/4W F
R504	1-249-417-11	CARBON 1K 5%	1/4W F
R505	1-249-417-11	CARBON 1K 5%	1/4W F
R506	1-249-417-11	CARBON 1K 5%	1/4W F
R507	1-249-417-11	CARBON 1K 5%	1/4W F
R511	1-249-423-11	CARBON 3.3K 5%	1/4W F
R512	1-249-423-11	CARBON 3.3K 5%	1/4W F
R513	1-249-429-11	CARBON 10K 5%	1/4W
R514	1-249-441-11	CARBON 100K 5%	1/4W
R515	1-249-429-11	CARBON 10K 5%	1/4W
R516	1-249-417-11	CARBON 1K 5%	1/4W F
R517	1-249-417-11	CARBON 1K 5%	1/4W F
R518	1-249-420-11	CARBON 1.8K 5%	1/4W F
R519	1-249-417-11	CARBON 1K 5%	1/4W F
R520	1-249-429-11	CARBON 10K 5%	1/4W
R521	1-249-433-11	CARBON 22K 5%	1/4W
R522	1-249-433-11	CARBON 22K 5%	1/4W
R523	1-249-433-11	CARBON 22K 5%	1/4W
R524	1-249-433-11	CARBON 22K 5%	1/4W
R525	1-249-425-11	CARBON 4.7K 5%	1/4W F
R526	1-249-433-11	CARBON 22K 5%	1/4W
R527	1-249-433-11	CARBON 22K 5%	1/4W
R528	1-249-433-11	CARBON 22K 5%	1/4W
R529	1-249-433-11	CARBON 22K 5%	1/4W
R530	1-249-433-11	CARBON 22K 5%	1/4W
R531	1-249-433-11	CARBON 22K 5%	1/4W
R532	1-249-433-11	CARBON 22K 5%	1/4W
R533	1-249-433-11	CARBON 22K 5%	1/4W
R534	1-249-419-11	CARBON 1.5K 5%	1/4W F
R535	1-249-419-11	CARBON 1.5K 5%	1/4W F
R536	1-249-419-11	CARBON 1.5K 5%	1/4W F
R537	1-249-419-11	CARBON 1.5K 5%	1/4W F
R538	1-249-421-11	CARBON 2.2K 5%	1/4W F
R539	1-249-421-11	CARBON 2.2K 5%	1/4W F
R542	1-249-441-11	CARBON 100K 5%	1/4W
R543	1-249-441-11	CARBON 100K 5%	1/4W
R544	1-249-425-11	CARBON 4.7K 5%	1/4W F
R545	1-249-425-11	CARBON 4.7K 5%	1/4W F
R548	1-249-425-11	CARBON 4.7K 5%	1/4W F
R549	1-249-425-11	CARBON 4.7K 5%	1/4W F

CD MAIN

CD PANEL

Ref. No.	Part No.	Description	Remark
R550	1-249-413-11	CARBON	470 5% 1/4W F
R551	1-249-441-11	CARBON	100K 5% 1/4W
R552	1-249-441-11	CARBON	100K 5% 1/4W
R553	1-249-441-11	CARBON	100K 5% 1/4W
R600	1-249-409-11	CARBON	220 5% 1/4W F
R601	1-249-409-11	CARBON	220 5% 1/4W F
R602	1-249-433-11	CARBON	22K 5% 1/4W
R603	1-249-433-11	CARBON	22K 5% 1/4W
R604	1-249-433-11	CARBON	22K 5% 1/4W
R609	1-249-435-11	CARBON	33K 5% 1/4W
R610	1-249-438-11	CARBON	56K 5% 1/4W
R611	1-249-429-11	CARBON	10K 5% 1/4W
R612	1-249-429-11	CARBON	10K 5% 1/4W
R613	1-249-417-11	CARBON	1K 5% 1/4W F
R614	1-249-429-11	CARBON	10K 5% 1/4W
R615	1-249-433-11	CARBON	22K 5% 1/4W
R616	1-249-393-11	CARBON	10 5% 1/4W F
R617	1-249-413-11	CARBON	470 5% 1/4W F
R801	1-249-405-11	CARBON	100 5% 1/4W F

< TRANSFORMER >

△T500 1-423-426-11 TRANSFORMER, POWER

< VIBRATOR >

X501 1-579-833-21 VIBRATOR, CRYSTAL 33MHz

* A-4356-653-A CD PANEL BOARD, COMPLETE (D209:AEP, E, IT, EE, EA, AUS, MY, SP/D309:AEP, E, IT, EA, EE, MY, SP, CIS, AUS)

* A-4356-662-A CD PANEL BOARD, COMPLETE (D209:UK, G/D309:UK, G)

* 4-955-816-01 HOLDER (1F), FL TUBE

< CAPACITOR >

C702	1-161-494-00	CERAMIC	0.022uF	25V
C703	1-161-494-00	CERAMIC	0.022uF	25V
C704	1-161-494-00	CERAMIC	0.022uF	25V
C705	1-164-159-11	CERAMIC	0.1uF	50V
C706	1-124-126-00	ELECT	47uF	20% 10V

< CONNECTOR >

* CN701 1-568-842-11 SOCKET, CONNECTOR 27P

< COMPOSITION CIRCUIT BLOCK >

CP701	1-239-612-11	COMPOSITION CIRCUIT BLOCK
CP702	1-239-613-11	COMPOSITION CIRCUIT BLOCK

Ref. No.	Part No.	Description	Remark
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< DIODE >

D701	8-719-987-63	DIODE 1N4148M
D702	8-719-987-63	DIODE 1N4148M
D703	8-719-987-63	DIODE 1N4148M
D704	8-719-987-63	DIODE 1N4148M
D705	8-719-987-63	DIODE 1N4148M

D706	8-719-987-63	DIODE 1N4148M
D707	8-719-987-63	DIODE 1N4148M
D708	8-719-987-63	DIODE 1N4148M
D709	8-719-987-63	DIODE 1N4148M
D710	8-719-987-63	DIODE 1N4148M

D711	8-719-987-63	DIODE 1N4148M
D712	8-719-001-21	DIODE UZL-9H1

< FLUORESCENT INDICATOR >

FLD701 1-519-681-21 INDICATOR TUBE, FLUORESCENT

< IC >

IC701 8-759-156-33 IC uPD75216ACW-W32

< RESISTOR >

R701	1-249-435-11	CARBON	33K 5% 1/4W
R702	1-249-435-11	CARBON	33K 5% 1/4W
R703	1-249-435-11	CARBON	33K 5% 1/4W
R704	1-249-435-11	CARBON	33K 5% 1/4W
R705	1-249-435-11	CARBON	33K 5% 1/4W

R706	1-249-425-11	CARBON	4.7K 5% 1/4W F
R707	1-249-425-11	CARBON	4.7K 5% 1/4W F
R708	1-249-439-11	CARBON	68K 5% 1/4W

< SWITCH >

S701	1-554-303-21	SWITCH, TACTILE (PROGRAM)
S702	1-554-303-21	SWITCH, TACTILE (REPEAT)
S703	1-554-303-21	SWITCH, TACTILE (PAUSE)
S704	1-554-303-21	SWITCH, TACTILE (▶▶)
S705	1-554-303-21	SWITCH, TACTILE (CONTINUE)

S706	1-554-303-21	SWITCH, TACTILE (FADER)
S707	1-554-303-21	SWITCH, TACTILE (PLAY)
S708	1-554-303-21	SWITCH, TACTILE (AMS K4)
S709	1-554-303-21	SWITCH, TACTILE (SHUFFLE)
S710	1-554-303-21	SWITCH, TACTILE (TIME)

S711	1-554-303-21	SWITCH, TACTILE (◀◀)
S712	1-554-303-21	SWITCH, TACTILE (OPEN/CLOSE)
S713	1-554-303-21	SWITCH, TACTILE (STOP)
S714	1-554-303-21	SWITCH, TACTILE (AMS ▶▶)
S715	1-554-303-21	SWITCH, TACTILE (EDIT/TIME FADE)

The components identified by mark △ or dotted line with mark △ are critical for safety. Replace only with part number specified.

Les composants identifiés par une marque △ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

CD PANEL

LEAF SW-A

LEAF SW-B

LOADING

TC MAIN

Ref. No.	Part No.	Description	Remark
S716	1-554-303-21	SWITCH, TACTILE (TIME SET)	
S718	1-554-303-21	SWITCH, TACTILE (MUSIC SCAN)	
S719	1-554-303-21	SWITCH, TACTILE (1)	
S720	1-554-303-21	SWITCH, TACTILE (6)	
S721	1-554-303-21	SWITCH, TACTILE (11)	
S723	1-554-303-21	SWITCH, TACTILE (2)	
S724	1-554-303-21	SWITCH, TACTILE (7)	
S725	1-554-303-21	SWITCH, TACTILE (12)	
S727	1-554-303-21	SWITCH, TACTILE (3)	
S728	1-554-303-21	SWITCH, TACTILE (8)	
S731	1-554-303-21	SWITCH, TACTILE (4)	
S732	1-554-303-21	SWITCH, TACTILE (9)	
S734	1-554-303-21	SWITCH, TACTILE (5)	
S736	1-554-303-21	SWITCH, TACTILE (10)	
S739	1-554-303-21	SWITCH, TACTILE (>12)	
S740	1-554-303-21	SWITCH, TACTILE (CHECK)	
S741	1-554-303-21	SWITCH, TACTILE (CLEAR)	
S742	1-554-303-21	SWITCH, TACTILE (A. SPACE/A. CUE)	

< VIBRATOR >

X701 1-577-082-11 VIBRATOR, CERAMIC 4MHz

* 1-638-020-11 LEAF SW-A BOARD

< CONNECTOR >

* CNP81 1-568-850-11 SOCKET, CONNECTOR 7P

< IC >

IC81 8-719-710-03 DIODE NJL5165K-B

< RESISTOR >

R84 1-249-417-11 CARBON 1K 5% 1/4W F
R85 1-249-408-11 CARBON 180 5% 1/4W F

< SWITCH >

S81 1-571-958-11 SWITCH, PUSH (1 KEY) (STOP DET)
S82 1-571-281-21 SWITCH, LEAF (TYPE II DET)
S86 1-571-281-21 SWITCH, LEAF (HALF DET)

* 1-638-020-11 LEAF SW-B BOARD

8-719-710-03 DIODE NJL5165K-B

< CONNECTOR >

* CNP81 1-568-850-11 SOCKET, CONNECTOR 7P

Ref. No.	Part No.	Description	Remark
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< RESISTOR >

R81 1-249-414-11 CARBON 560 5% 1/4W F
R82 1-247-818-11 CARBON 300 5% 1/4W
R83 1-247-834-11 CARBON 1.3K 5% 1/4W
R84 1-249-417-11 CARBON 1K 5% 1/4W F
R85 1-249-408-11 CARBON 180 5% 1/4W F

< SWITCH >

S81 1-571-958-11 SWITCH, PUSH (1 KEY) (STOP DET)
S82 1-571-281-21 SWITCH, LEAF (TYPE II DET)
S84 1-571-281-21 SWITCH, LEAF (ERASE PROOF)
S85 1-571-281-21 SWITCH, LEAF (ERASE PROOF)
S86 1-571-281-21 SWITCH, LEAF (HALF DET)

* 1-632-202-11 LOADING BOARD

< CONNECTOR >

* CN301 1-564-707-11 PIN, CONNECTOR (SMALL TYPE) 5P

< MOTOR >

M201 X-4604-363-A MOTOR (L) ASSY

< SWITCH >

S271 1-572-086-11 SWITCH, LEAF
S272 1-572-086-11 SWITCH, LEAF

* A-4356-643-A TC MAIN BOARD, COMPLETE (D209:AEP, E,
IT, EE, EA, AUS, MY, SP/D309:AEP, E, IT, EA,
EE, MY, SP, CIS, AUS)

* A-4356-654-A TC MAIN BOARD, COMPLETE
(D209:UK, G/D309:UK, G)

* 4-942-204-01 PLATE, GROUND

< CAPACITOR >

C122 1-130-479-00 MYLAR 0.0047uF 5% 50V
C123 1-162-291-31 CERAMIC 560PF 10% 50V
C126 1-136-165-00 FILM 0.1uF 5% 50V
C127 1-126-791-11 ELECT 10uF 20% 35V
C128 1-126-301-11 ELECT 1uF 20% 50V
C129 1-124-465-00 ELECT 0.47uF 20% 50V
C130 1-126-791-11 ELECT 10uF 20% 35V
C131 1-164-159-11 CERAMIC 0.1uF 50V
C132 1-126-791-11 ELECT 10uF 20% 35V
C141 1-126-301-11 ELECT 1uF 20% 50V
C142 1-126-791-11 ELECT 10uF 20% 35V
C143 1-161-375-00 CERAMIC 0.0022uF 20% 50V
C222 1-130-479-00 MYLAR 0.0047uF 5% 50V
C223 1-162-291-31 CERAMIC 560PF 10% 50V
C226 1-136-165-00 FILM 0.1uF 5% 50V

TC MAIN

Ref. No.	Part No.	Description	Remark
C227	1-126-791-11	ELECT 10uF	20% 35V
C228	1-126-301-11	ELECT 1uF	20% 50V
C229	1-124-465-00	ELECT 0.47uF	20% 50V
C230	1-126-791-11	ELECT 10uF	20% 35V
C231	1-161-377-00	CERAMIC 0.0047uF	20% 16V
C232	1-161-375-00	CERAMIC 0.0022uF	20% 50V
C233	1-124-465-00	ELECT 0.47uF	20% 50V
C241	1-126-301-11	ELECT 1uF	20% 50V
C242	1-126-791-11	ELECT 10uF	20% 35V
C243	1-161-375-00	CERAMIC 0.0022uF	20% 50V
C301	1-126-791-11	ELECT 10uF	20% 35V
C302	1-126-926-11	ELECT 1000uF	20% 10V
C303	1-123-382-00	ELECT 3.3uF	20% 100V
C304	1-164-159-11	CERAMIC 0.1uF	50V
C305	1-164-159-11	CERAMIC 0.1uF	50V
C306	1-126-933-11	ELECT 100uF	20% 16V
C307	1-126-933-11	ELECT 100uF	20% 16V
C308	1-126-926-11	ELECT 1000uF	20% 10V
C309	1-126-926-11	ELECT 1000uF	20% 10V
C310	1-126-791-11	ELECT 10uF	20% 35V
C311	1-126-791-11	ELECT 10uF	20% 35V
C312	1-126-949-11	ELECT 220uF	20% 35V
C314	1-124-584-00	ELECT 100uF	20% 10V
C315	1-126-926-11	ELECT 1000uF	20% 10V
C316	1-126-933-11	ELECT 100uF	20% 16V
C317	1-126-933-11	ELECT 100uF	20% 16V
C318	1-126-933-11	ELECT 100uF	20% 16V
C456	1-162-290-31	CERAMIC 470PF	10% 50V
C457	1-162-290-31	CERAMIC 470PF	10% 50V
C458	1-164-159-11	CERAMIC 0.1uF	50V
C459	1-164-159-11	CERAMIC 0.1uF	50V

< CONNECTOR >

- * CN101 1-564-523-11 PLUG, CONNECTOR 8P
- * CN301 1-564-519-11 PLUG, CONNECTOR 4P
- * CN302 1-564-506-11 PLUG, CONNECTOR 3P
- * CN303 1-564-506-11 PLUG, CONNECTOR 3P
- * CN401 1-564-517-11 PLUG, CONNECTOR 2P

- CN402 1-580-783-11 CONNECTOR, BOARD TO BOARD
- CN403 1-580-783-11 CONNECTOR, BOARD TO BOARD
- CN404 1-580-783-11 CONNECTOR, BOARD TO BOARD
- CN405 1-568-437-11 SOCKET, CONNECTOR 7P
- CN406 1-568-437-11 SOCKET, CONNECTOR 7P

- CN407 1-568-441-11 SOCKET, CONNECTOR 9P
- CN408 1-568-444-11 SOCKET, CONNECTOR 13P

< DIODE >

- D301 8-719-000-78 DIODE UZL-7L2

Ref. No.	Part No.	Description	Remark
D302	8-719-987-63	DIODE 1N4148M	
D303	8-719-987-63	DIODE 1N4148M	
D304	8-719-987-63	DIODE 1N4148M	
D305	8-719-200-82	DIODE 11ES2	
D306	8-719-200-82	DIODE 11ES2	

- D401 8-719-987-63 DIODE 1N4148M
- D402 8-719-987-63 DIODE 1N4148M
- D403 8-719-987-63 DIODE 1N4148M

< IC >

- IC101 8-759-098-75 IC HA12171NT
- IC301 8-759-071-48 IC M5F7807L
- IC401 8-759-076-36 IC M50964-SOX-1044
- IC402 8-759-635-63 IC M51943BSL
- IC403 8-759-207-05 IC TA7272P

< TRANSISTOR >

- Q101 8-729-119-78 TRANSISTOR 2SC2785-HFE
- Q201 8-729-119-78 TRANSISTOR 2SC2785-HFE
- Q301 8-729-119-78 TRANSISTOR 2SC2785-HFE
- Q400 8-729-900-65 TRANSISTOR DTA144ES
- Q401 8-729-900-65 TRANSISTOR DTA144ES
- Q402 8-729-900-65 TRANSISTOR DTA144ES
- Q403 8-729-900-65 TRANSISTOR DTA144ES
- Q404 8-729-900-65 TRANSISTOR DTA144ES
- Q405 8-729-900-65 TRANSISTOR DTA144ES
- Q406 8-729-900-89 TRANSISTOR DTC144ES
- Q407 8-729-900-89 TRANSISTOR DTC144ES
- Q408 8-729-900-65 TRANSISTOR DTA144ES
- Q409 8-729-119-78 TRANSISTOR 2SC2785-HFE
- Q410 8-729-119-78 TRANSISTOR 2SC2785-HFE
- Q411 8-729-801-84 TRANSISTOR 2SB1013-4

- Q412 8-729-801-84 TRANSISTOR 2SB1013-4
- Q413 8-729-900-65 TRANSISTOR DTA144ES
- Q414 8-729-900-89 TRANSISTOR DTC144ES

< RESISTOR >

- R120 1-215-451-00 METAL 18K 1% 1/6W
- R121 1-249-430-11 CARBON 12K 5% 1/4W
- R122 1-249-431-11 CARBON 15K 5% 1/4W
- R123 1-249-425-11 CARBON 4.7K 5% 1/4W F
- R124 1-249-428-11 CARBON 8.2K 5% 1/4W F
- R125 1-249-429-11 CARBON 10K 5% 1/4W
- R127 1-249-429-11 CARBON 10K 5% 1/4W
- R130 1-249-429-11 CARBON 10K 5% 1/4W
- R131 1-249-425-11 CARBON 4.7K 5% 1/4W F
- R132 1-249-429-11 CARBON 10K 5% 1/4W
- R133 1-249-429-11 CARBON 10K 5% 1/4W
- R135 1-247-864-11 CARBON 24K 5% 1/4W

TC MAIN

TC PANEL (A)

Ref.No.	Part No.	Description	Remark
R136	1-249-429-11	CARBON	10K 5% 1/4W
R137	1-249-429-11	CARBON	10K 5% 1/4W
R138	1-249-429-11	CARBON	10K 5% 1/4W
R141	1-249-421-11	CARBON	2.2K 5% 1/4W F
R142	1-249-428-11	CARBON	8.2K 5% 1/4W F
R143	1-247-840-00	CARBON	2.4K 5% 1/4W
R144	1-249-433-11	CARBON	22K 5% 1/4W
R145	1-249-417-11	CARBON	1K 5% 1/4W F
R221	1-249-430-11	CARBON	12K 5% 1/4W
R222	1-249-431-11	CARBON	15K 5% 1/4W
R223	1-249-425-11	CARBON	4.7K 5% 1/4W F
R224	1-249-428-11	CARBON	8.2K 5% 1/4W F
R225	1-247-882-11	CARBON	130K 5% 1/4W
R226	1-247-866-11	CARBON	30K 5% 1/4W
R229	1-249-429-11	CARBON	10K 5% 1/4W
R230	1-249-432-11	CARBON	18K 5% 1/4W
R231	1-247-885-00	CARBON	180K 5% 1/4W
R241	1-249-421-11	CARBON	2.2K 5% 1/4W F
R242	1-249-428-11	CARBON	8.2K 5% 1/4W F
R243	1-247-840-00	CARBON	2.4K 5% 1/4W
R244	1-249-433-11	CARBON	22K 5% 1/4W
R245	1-249-417-11	CARBON	1K 5% 1/4W F
R300	1-249-405-11	CARBON	100 5% 1/4W F
R301	1-249-421-11	CARBON	2.2K 5% 1/4W F
R302	1-249-405-11	CARBON	100 5% 1/4W F
R303	1-249-422-11	CARBON	2.7K 5% 1/4W F
R352	1-249-393-11	CARBON	10 5% 1/4W F
R400	1-249-389-11	CARBON	4.7 5% 1/4W F
R401	1-249-429-11	CARBON	10K 5% 1/4W
R402	1-247-903-00	CARBON	1M 5% 1/4W
R403	1-247-895-00	CARBON	470K 5% 1/4W
R404	1-247-895-00	CARBON	470K 5% 1/4W
R405	1-249-408-11	CARBON	180 5% 1/4W F
R406	1-249-408-11	CARBON	180 5% 1/4W F
R407	1-249-410-11	CARBON	270 5% 1/4W F
R408	1-247-812-11	CARBON	160 5% 1/4W
R409	1-247-812-11	CARBON	160 5% 1/4W
R410	1-247-816-11	CARBON	240 5% 1/4W
R411	1-247-812-11	CARBON	160 5% 1/4W
R412	1-249-411-11	CARBON	330 5% 1/4W
R413	1-249-429-11	CARBON	10K 5% 1/4W
R414	1-249-429-11	CARBON	10K 5% 1/4W
R415	1-249-421-11	CARBON	2.2K 5% 1/4W F
R416	1-249-421-11	CARBON	2.2K 5% 1/4W F
R417	1-249-437-11	CARBON	47K 5% 1/4W
R418	1-249-429-11	CARBON	10K 5% 1/4W
R420	1-249-425-11	CARBON	4.7K 5% 1/4W F
R422	1-249-425-11	CARBON	4.7K 5% 1/4W F
R423	1-249-429-11	CARBON	10K 5% 1/4W

Ref.No.	Part No.	Description	Remark
R425	1-249-417-11	CARBON	1K 5% 1/4W F
R426	1-249-417-11	CARBON	1K 5% 1/4W F
R427	1-249-417-11	CARBON	1K 5% 1/4W F
R431	1-249-429-11	CARBON	10K 5% 1/4W
R432	1-249-415-11	CARBON	680 5% 1/4W F
R433	1-249-429-11	CARBON	10K 5% 1/4W
R434	1-249-415-11	CARBON	680 5% 1/4W F
R435	1-249-429-11	CARBON	10K 5% 1/4W
R451	1-249-425-11	CARBON	4.7K 5% 1/4W F
R452	1-249-435-11	CARBON	33K 5% 1/4W
R453	1-249-437-11	CARBON	47K 5% 1/4W
R454	1-247-872-11	CARBON	51K 5% 1/4W
R455	1-247-862-11	CARBON	20K 5% 1/4W
R456	1-247-866-11	CARBON	30K 5% 1/4W
R457	1-247-872-11	CARBON	51K 5% 1/4W
R458	1-249-405-11	CARBON	100 5% 1/4W F
R459	1-249-381-11	CARBON	1 5% 1/4W F
R460	1-249-381-11	CARBON	1 5% 1/4W F
R461	1-249-425-11	CARBON	4.7K 5% 1/4W F
R462	1-249-435-11	CARBON	33K 5% 1/4W
R463	1-249-437-11	CARBON	47K 5% 1/4W
R464	1-247-872-11	CARBON	51K 5% 1/4W
R465	1-247-862-11	CARBON	20K 5% 1/4W
R466	1-247-866-11	CARBON	30K 5% 1/4W
R467	1-247-872-11	CARBON	51K 5% 1/4W
R468	1-249-405-11	CARBON	100 5% 1/4W F
R469	1-249-381-11	CARBON	1 5% 1/4W F
R470	1-249-381-11	CARBON	1 5% 1/4W F
R471	1-249-429-11	CARBON	10K 5% 1/4W
R472	1-249-425-11	CARBON	4.7K 5% 1/4W F
R473	1-249-434-11	CARBON	27K 5% 1/4W
R474	1-249-429-11	CARBON	10K 5% 1/4W
R476	1-249-425-11	CARBON	4.7K 5% 1/4W F
R477	1-249-434-11	CARBON	27K 5% 1/4W

< VARIABLE RESISTOR >

RV101 1-230-496-11 RES, ADJ, CARBON 10K
RV201 1-230-496-11 RES, ADJ, CARBON 10K

< VIBRATOR >

X401 1-577-358-21 VIBRATOR, CERAMIC

* 1-646-887-11 TC PANEL (A) BOARD

< CONNECTOR >

CN451 1-568-442-11 SOCKET, CONNECTOR 9P

TC PANEL (A)

TC PANEL (B)

Ref. No.	Part No.	Description	Remark
----------	----------	-------------	--------

< DIODE >

D481	8-719-313-65	DIODE SEL2410E-TH10	
D482	8-719-301-49	LED SEL2810A	
D483	8-719-301-49	LED SEL2810A	

< RESISTOR >

R481	1-249-407-11	CARBON	150	5%	1/4W	F
R482	1-249-409-11	CARBON	220	5%	1/4W	F
R483	1-249-415-11	CARBON	680	5%	1/4W	F
R484	1-249-417-11	CARBON	1K	5%	1/4W	F
R485	1-249-426-11	CARBON	5.6K	5%	1/4W	
R486	1-249-430-11	CARBON	12K	5%	1/4W	

< SWITCH >

S401	1-554-303-21	SWITCH, TACTILE (STOP)	
S402	1-554-303-21	SWITCH, TACTILE (▶)	
S403	1-554-303-21	SWITCH, TACTILE (◀)	
S404	1-554-303-21	SWITCH, TACTILE (◀▶)	
S405	1-554-303-21	SWITCH, TACTILE (▶▶)	
S406	1-572-269-11	SWITCH, SLIDE (DOLBY NR)	
S407	1-572-268-11	SWITCH, SLIDE (DIRECTION MODE)	

* 1-646-888-11 TC PANEL (B) BOARD

< CONNECTOR >

CN452	1-568-443-11	SOCKET, CONNECTOR 13P	
-------	--------------	-----------------------	--

< DIODE >

D491	8-719-301-37	LED SEL2210S-CD	
D492	8-719-301-49	LED SEL2810A	
D493	8-719-313-65	DIODE SEL2410E-TH10	
D494	8-719-301-49	LED SEL2810A	
D495	8-719-301-49	LED SEL2810A	
D496	8-719-301-37	LED SEL2210S-CD (D309)	
D497	8-719-301-37	LED SEL2210S-CD	
D498	8-719-301-37	LED SEL2210S-CD	

< RESISTOR >

R490	1-249-407-11	CARBON	150	5%	1/4W	F
R491	1-249-409-11	CARBON	220	5%	1/4W	F
R492	1-249-411-11	CARBON	330	5%	1/4W	
R493	1-249-413-11	CARBON	470	5%	1/4W	F
R494	1-249-411-11	CARBON	330	5%	1/4W	
R495	1-249-413-11	CARBON	470	5%	1/4W	F
R496	1-249-415-11	CARBON	680	5%	1/4W	F
R497	1-249-417-11	CARBON	1K	5%	1/4W	F

Ref. No.	Part No.	Description	Remark
----------	----------	-------------	--------

R498	1-249-420-11	CARBON	1.8K 5% 1/4W F
R499	1-249-424-11	CARBON	3.9K 5% 1/4W F

< SWITCH >

S451	1-554-303-21	SWITCH, TACTILE (STOP)	
S452	1-554-303-21	SWITCH, TACTILE (PAUSE)	
S453	1-554-303-21	SWITCH, TACTILE (▶)	
S454	1-554-303-21	SWITCH, TACTILE (◀)	
S455	1-554-303-21	SWITCH, TACTILE (REC MUTE)	
S456	1-554-303-21	SWITCH, TACTILE (◀◀)	
S457	1-554-303-21	SWITCH, TACTILE (▶▶)	
S458	1-554-303-21	SWITCH, TACTILE (REC)	
S459	1-554-303-21	SWITCH, TACTILE (DUBBING SPEED HIGH)	
S460	1-554-303-21	SWITCH, TACTILE (DUBBING SPEED NORMAL)	

S461	1-554-303-21	SWITCH, TACTILE (D309) (CD SYNCHRO)	
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MISCELLANEOUS

1-575-001-11 WIRE, FLAT TYPE (12 CORE)
1-638-983-11 PC BOARD, MOTOR FLEXIBLE
1-696-634-21 WIRE (FLAT TYPE) (22 CORE)
A 8-848-144-11 DEVICE, OPTICAL KSS-240A

56	1-751-209-11	WIRE (FLAT TYPE) (9 CORE)	
64	1-590-574-11	WIRE, FLAT TYPE (7 CORE)	
65	1-590-485-11	WIRE, FLAT TYPE (7 CORE)	
69	1-690-729-11	WIRE, FLAT TYPE (27 CORE)	
71	1-690-589-31	WIRE, FLAT TYPE (13 CORE) (D309:AUS)	
71	1-751-210-11	WIRE (FLAT TYPE) (13 CORE) (D209/D309: AEP, UK, E, G, IT, EE, EA, MY, SP, CIS)	

* 161	1-452-538-11	MAGNET	
HP901	A-2003-838-A	DECK ASSY, HEAD (DECK A)	
HRPE901A	2004-190-A	DECK ASSY, HEAD (DECK B)	
IC302	8-759-604-95	IC M5F79M07	
M101	X-4917-523-3	BASE (OUTSERT) ASSY (SPINDLE MOTOR)	
M901	X-3359-417-1	MOTOR ASSY (CAPSTAN)	
M902	X-3363-501-1	MOTOR ASSY (REEL)	
Q302	8-729-209-15	TRANSISTOR 2SD2012	

ACCESSORIES & PACKING MATERIALS

* 10	3-703-713-41	STICKER, SONY SYMBOL (10) (D209:AUS/D309:UK, AUS)	
* 5	4-941-548-01	LABEL, CLASS 1	
*	4-957-503-01	INDIVIDUAL CARTON (D209:AEP, IT)	
*	4-958-606-01	CUSHION (D209:AEP, IT)	

<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Remark</u>
-----------------	-----------------	--------------------	---------------

HARDWARE LIST

#1	7-685-646-79	SCREW +BVTP 3X8 TYPE2 N-S	
#2	7-621-775-10	SCREW +B 2. 6X4	
#6	7-621-255-15	SCREW +P 2X3	
#7	7-621-775-00	SCREW +B 2. 6X3	
#8	7-627-556-08	SCREW +P 2. 6X2. 8	

100-100-100-100

STR-A27/D209/D259

SERVICE MANUAL

STR-A27, STR-D209 and STR-259 are the tuner and amplifier section in LBT-A27CDM, LBT-D209CD and LBT-D259CD respectively.

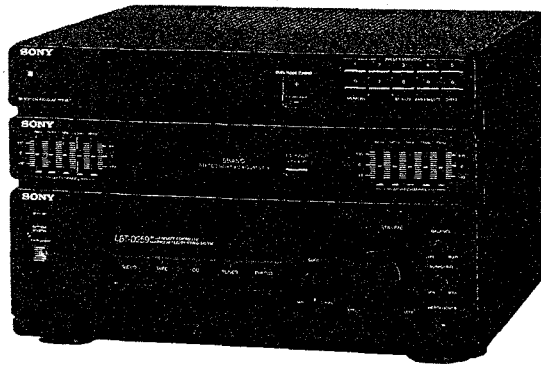


PHOTO: STR - D259

7111
Canadian Model
STR-D259
AEP Model
UK Model
STR-D209/D259
E Model
Australian Model
STR-A27

SPECIFICATIONS

Stereo FM-AM receiver

Tuner

System

FM stereo
FM/AM superheterodyne tuner

FM tuner section

Tuning range

87.5 to 108 MHz (EXCEPT EE)
65.0 to 74.0 MHz (EE)

Antenna

Intermediate frequency

75 ohms unbalanced
10.7 MHz

AM tuner section

Tuning range

MW:530 to 1710 kHz (Canadian model)
522 to 1611 kHz (Italian model)
531 to 1602 kHz (9 kHz step)
531 to 1710 kHz (10 kHz step)
531 to 1602 kHz (Other models)

LW:153 to 279 kHz
SW:5.95 to 17.90 kHz (Mideasten model)

Antenna

AM loop antenna
External antenna terminal

Intermediate frequency

450 kHz

Amplifier

DIN power output

30 W + 30 W (6 ohms, at 1 kHz)

Continuous RMS power output

35 W + 35 W (6 ohms, at 1 kHz, 5% THD)

Music power output

60 W + 60 W (6 ohms)

Input	Jack type	Sensitivity	Impedance
VIDEO IN	Phono	300 mV	47 kohms
PHONO IN	Phono	3 mV	47 kohms

Output	Jack type	Impedance
SURROUND SPEAKER	Phono	Accepts speakers of 16 ohms
HEADPHONES	Stereophone	Accepts headphones of 8 ohms or more

Frequency response

VIDEO: 15 Hz to 50 kHz $+0$ -3 dB

General

Power requirements

220 - 230 V AC, 50/60 Hz (AEP, IT, EE, G)
120 V AC, 60 Hz (CND)
240 V-AC, 50 Hz (UK)
110 - 120 V/220 - 240 V-AC,
50 Hz/60 Hz (E, AUS)
100 W (AEP, AE2, IT, EE, G, UK)
115 W (CND)
170 W (E, AUS, AU2)

Power consumption

Mass

Approx. 5.9 kg

Dimensions

Approx. 355 × 225 × 330 mm
(w/h/d, including projections)

STEREO FM-AM RECEIVER
SONY®

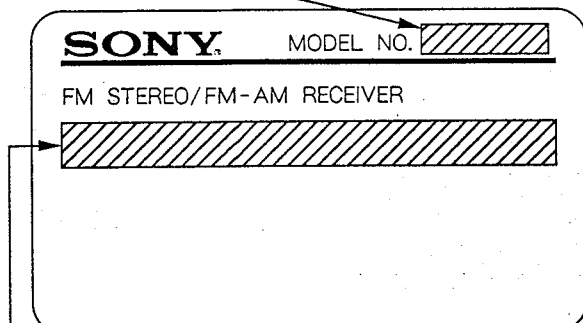


7111

— MODEL IDENTIFICATION —

(Specification Label)

STR-A27, STR-D209, STR-D259



- CND model : AC : 120V 60Hz 115W
- AEP, IT, EE, G model : AC : 220V-230V~50/60Hz 100W
- UK model : AC : 240V~50Hz 100W
- E, AUS model : AC : 110-120V/220-240V~50/60Hz 170W

Note : CND : Canadian model
 G : German
 IT : Italian model
 EE : East European model
 AUS, AU2 : Australian model

• CAUTION

Be sure to use insulation sheet (A4-959-364-01) when replacing power transformer because it is safely related part.

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK OR DOTTED LINE WITH MARK ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

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ATTENTION AU COMPOSANT AYANT RAPPORT À LA SÉCURITÉ!

LES COMPOSANTS IDENTIFIÉS PAR UNE MARQUE SUR LES DIAGRAMMES SCHÉMATIQUES ET LA LISTE DES PIÈCES SONT CRITIQUES POUR LA SÉCURITÉ DE FONCTIONNEMENT. NE REMPLACER CES COMPOSANTS QUE PAR DES PIÈCES SONY DONT LES NUMÉROS SONT DONNÉS DANS CE MANUEL OU DANS LES SUPPLÉMENTS PUBLIÉS PAR SONY.

SECTION 1 GENERAL

This section is extracted from instruction manual.

Location of Controls

Refer to the pages indicated in parentheses for details.

Tuner

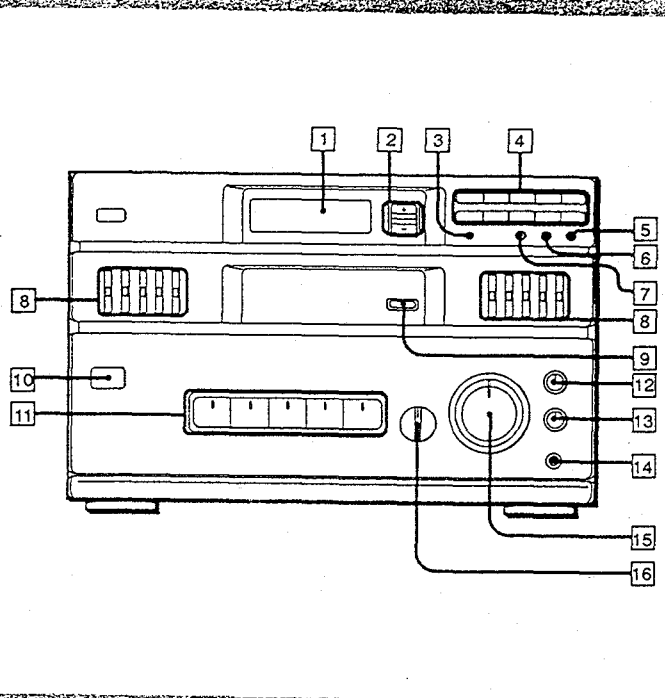
- 1 Display window
- 2 DUAL MODE TUNING + / - buttons (20, 22)
- 3 MEMORY button (22)
- 4 Numeric buttons (22)
- 5 SHIFT button (22)
- 6 BAND SELECT button (20)
- 7 ST/MUTE button (20, 22)

Graphic Equalizer

- 8 5 BAND GRAPHIC EQUALIZER controls (16)
- 9 EQUALIZER switch (16)

Amplifier

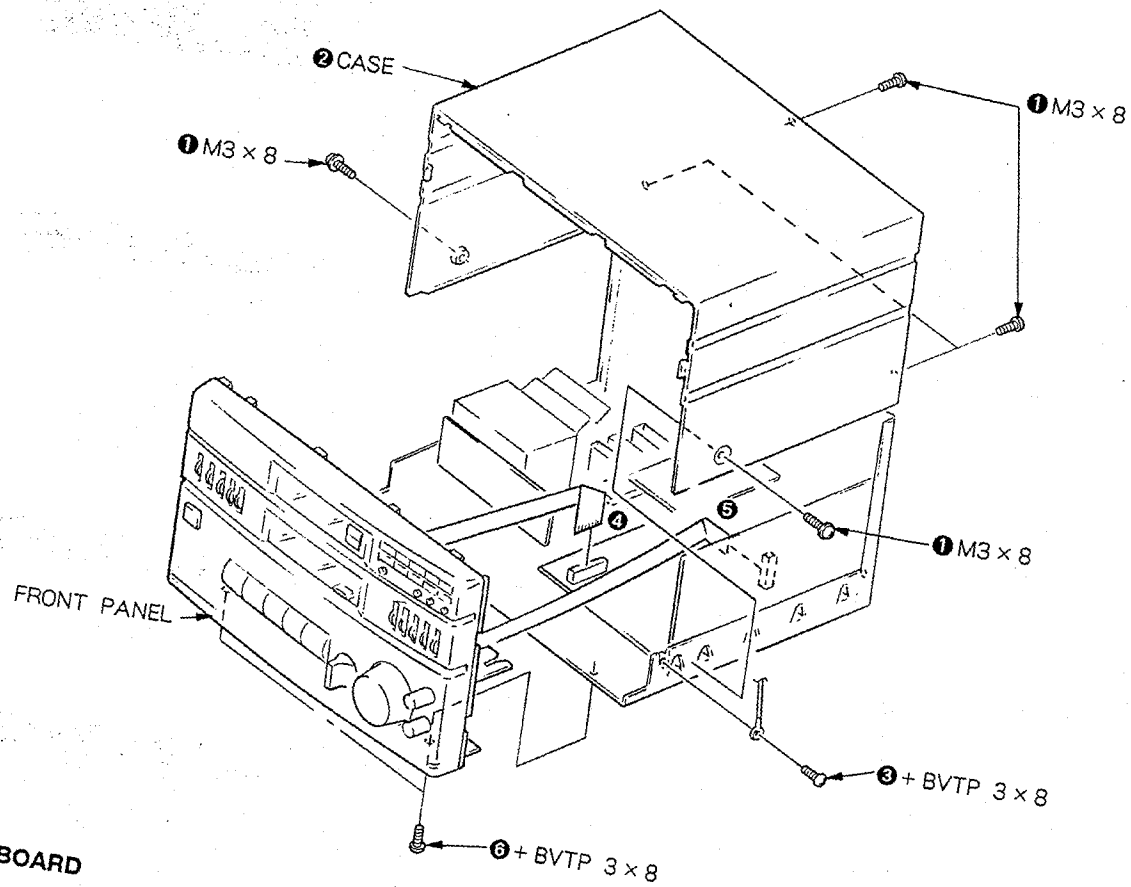
- 10 SYSTEM POWER button (14)
- 11 Function selectors and indicators (VIDEO/TAPE/CD/TUNER/PHONO)
- 12 BALANCE control (16)
- 13 SURROUND control (16)
- 14 HEADPHONES jack
- 15 VOLUME control and indicator (16)
- 16 DBFB (dynamic bass feedback) control (16)



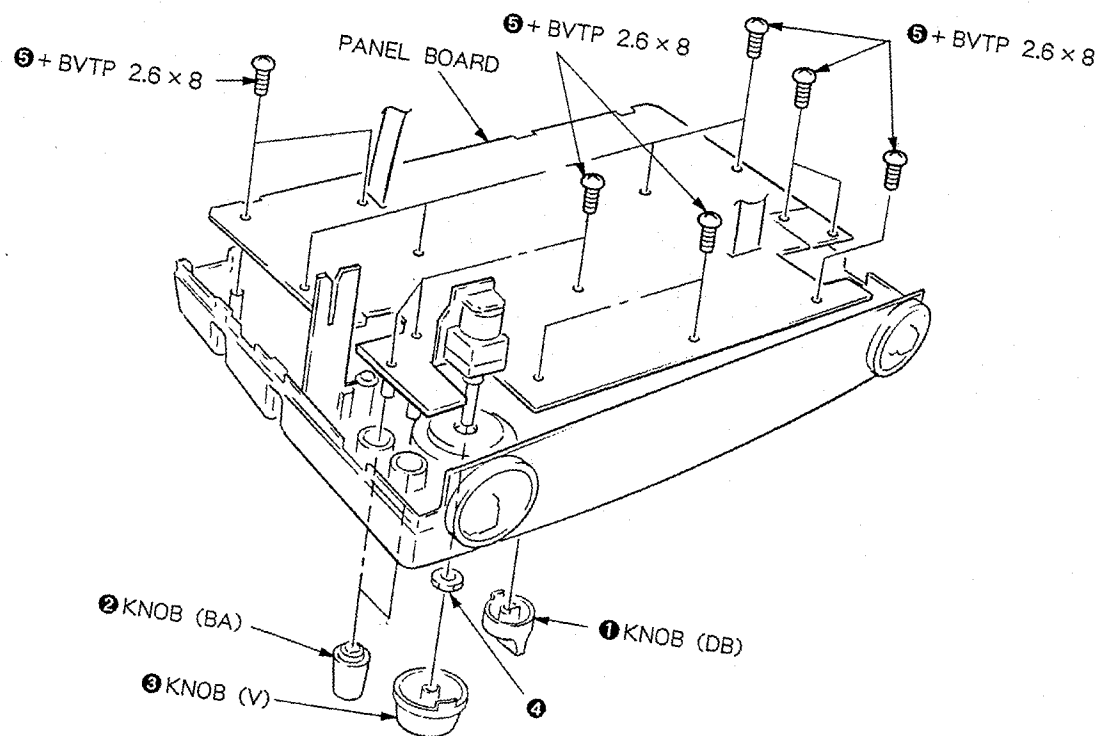
SECTION 2 DISASSEMBLY

NOTE: Follow the disassembly procedure in the numerical order given.

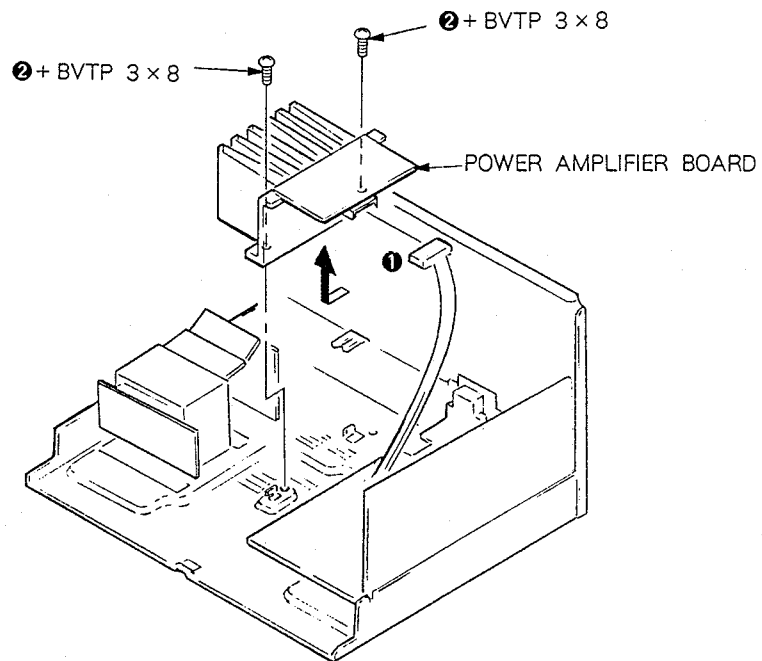
2-1. FRONT PANEL



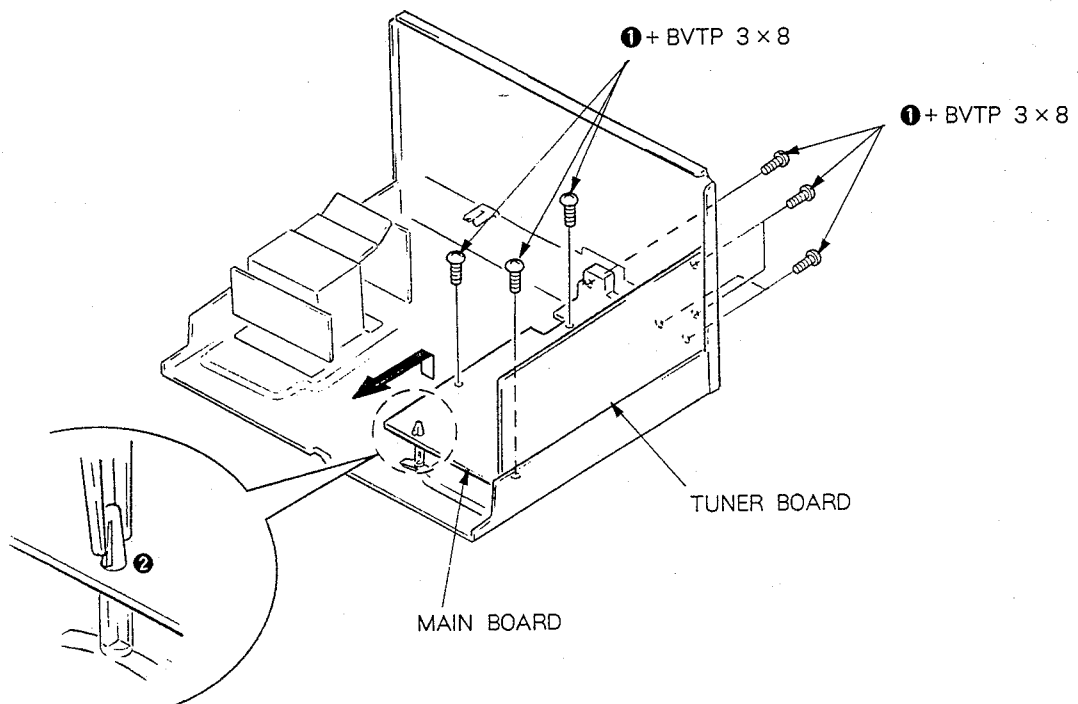
2-2. PANEL BOARD



2-3. POWER AMPLIFIER BOARD



2-4. MAIN /TUNER BOARD



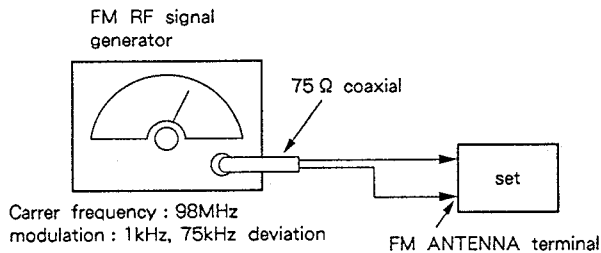
SECTION 3 ADJUSTMENTS

Note: As a front-end (FE301) is difficult to repair if faulty, replace it with new one.

TUNER SECTION

FM SECTION ADJUSTMENTS

Setting :



• TUNER OUT CHECK POINT

Speaker out receive 98MHz 60dB μ (1mV) and set the SPEAKER out to 10dBs by VOLUME.

Speaker load : 6 Ω both CH

FM NULL Adjustment

Procedure :

1. Supply a 60dB μ (1mV) 98MHz signal from the ANTENNA terminal.
2. Tune the set to 98MHz.
3. Adjust T301 for 0V reading on the measurement point.

FM Tuned Indication Lighting Level Adjustment

Band : FM

ST/MUTE SW : OFF

Procedure :

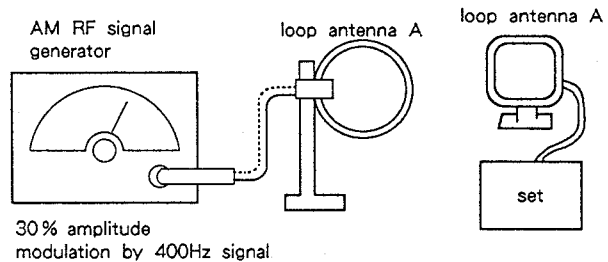
1. Supply a $24 \pm 1 \mu V$ ($20 \pm 4dB\mu$ (EE)) ($25 \pm 4dB\mu$ (EXCEPT EE)) 98MHz signal from the ANTENNA terminal.
2. Tune the set to 98MHz.
3. Adjust RV302 so that the FL601 **TUNED** light up.

Adjustment Location: main board

- Repeat the procedures in each adjustment several times, and the frequency coverage and tracking adjustments should be finally done by trimmer capacitors.

AM SECTION ADJUSTMENT

Setting :



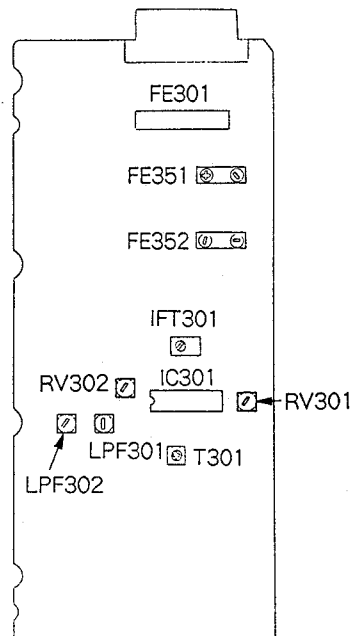
AM Tuned Indication Lighting Level Adjustment

Band : AM

Procedure :

1. Set loop antenna input level to 94dB μ /m, 1050 kHz and no signal tuned light should not on.
2. Tune the set to 1050kHz
3. Adjust RV301 so that the FL601 **TUNED** light up.

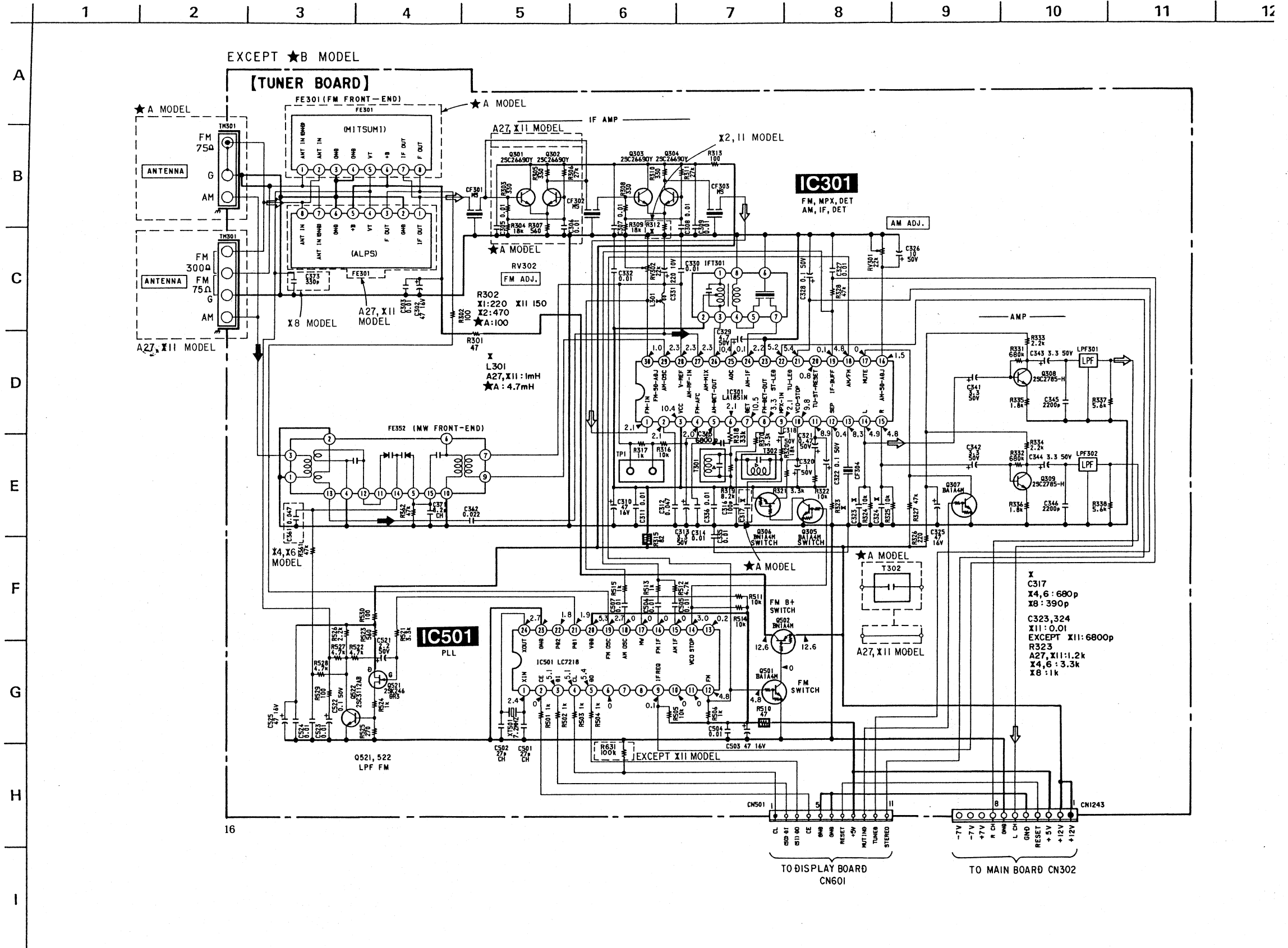
Adjustment Location: tuner board





SECTION 4

DIAGRAMS



4-1. SCHEMATIC DIAGRAM—TUNER SECTION—




Note on Schematic Diagram :






- All capacitors are in μF unless otherwise noted. pF : μF 50VW or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and $\frac{1}{4}$ W or less unless otherwise specified.
-  : nonflammable resistor.
-  : fusible resistor.

Note:

The components identified by mark  or dotted line with mark  are critical for safety. Replace only with part number specified.

Note:

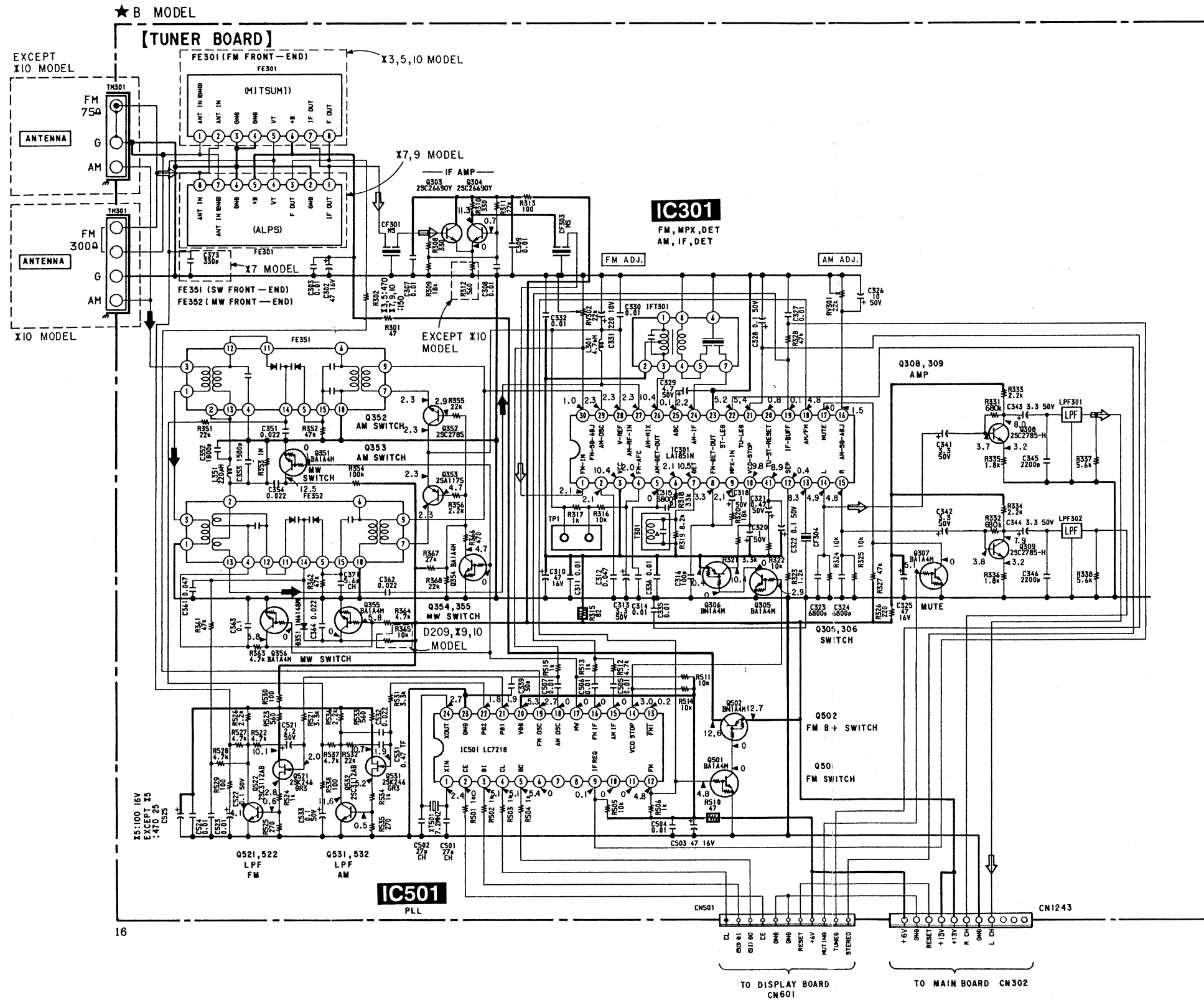
Note.
Les composants identifiés par une marque  sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifique.

-  : adjustment for repair.
-  : B + Line.
-  : B - Line.
- no mark : FM
- Voltages are taken with a VOM (input impedance 10 MΩ).
Voltage variations may be noted due to normal production tolerances.
- Signal path.
 -  : FM
 -  : AM

- ★ Model name and destination shown by * 1 to * 11.
- * 1 : A27 : Australian
- * 2 : A27 : E, AU2
- * 3 : D209 : UK
- * 4 : D209 : Italian
- * 5 : D209 : East European
- * 6 : D209 : German
- * 7 : D209 : AEP, AE2
- * 8 : D259 : Italian
- * 9 : D259 : AEP, AE2
- * 10 : D259 : UK
- * 11 : D259 : Canadian
- ★ A : * 4, 6, 8
- ★ B : * 3, 5, 7, 9, 10
- ★ C : 209 : AEP, * 3, 6, D259 : AEP, * 10

AU2 : AUS (with in PHONO MODEL)
AE2 : AEP (with in PHONO MODEL)

13 14 15 16 17 18 19 20 21 22 23 24 25 26



• Semiconductor Location

Ref. No.	Location	Ref. No.	Location
D351 (B)	E-6	IC1306	C-12
D1201	E-19	IC1601	J-19
D1202	E-15		
D1203	E-15	Q301 (E)	D-3
D1204	G-15	Q302 (E)	D-3
D1205	C-14	Q303 (E)	E-3
D1251	G-19	Q303 (B)	E-7
D1302	E-12	Q304 (E)	E-3
D1303	E-12	Q304 (B)	E-7
D1304	E-12	Q305 (E)	I-3
D1305	E-13	Q305 (B)	I-7
D1306	E-13	Q306 (E)	I-3
D1307	J-23	Q306 (B)	I-7
D1309	I-23	Q307 (E)	H-4
D1311	I-24	Q307 (B)	H-9
D1316	H-12	Q308 (E)	H-4
D1317	J-12	Q308 (B)	H-8
D1318	D-13	Q309 (E)	H-4
D1319	D-14	Q309 (B)	H-9
D1321	B-27	Q351 (B)	D-7
D1322	C-27	Q352 (B)	D-7
D1323	E-13	Q353 (B)	E-7
D1324	E-13	Q354 (B)	E-7
D1341	I-14	Q355 (B)	E-6
D1345	I-13	Q356 (B)	E-7
D1347	J-16	Q501 (E)	F-1
D1354	B-25	Q501 (B)	F-6
D1355	B-25	Q502 (E)	F-1
D1368	D-14	Q502 (B)	F-6
D1369	D-13	Q521 (E)	C-4
D1370	J-24	Q521 (B)	C-9
		Q522 (E)	B-4
IC301 (E)	G-2	Q522 (B)	B-9
IC301 (B)	G-7	Q531 (B)	D-8
IC501 (E)	E-4	Q532 (B)	C-9
IC501 (B)	E-9	Q1201	E-19
IC1001	D-11	Q1202	H-18
IC1002	G-11	Q1203	H-18
IC1003	I-11	Q1204	H-15
IC1201	F-20	Q1251	G-19
IC1202	F-15	Q1301	J-23
IC1302	J-12	Q1302	J-13
IC1303	I-14	Q1304	I-15
IC1304	H-13	Q1305	I-15
IC1305	H-14		

(B) : ★ B

(E) : EXCEPT ★ B

Note on Mounting Diagram :

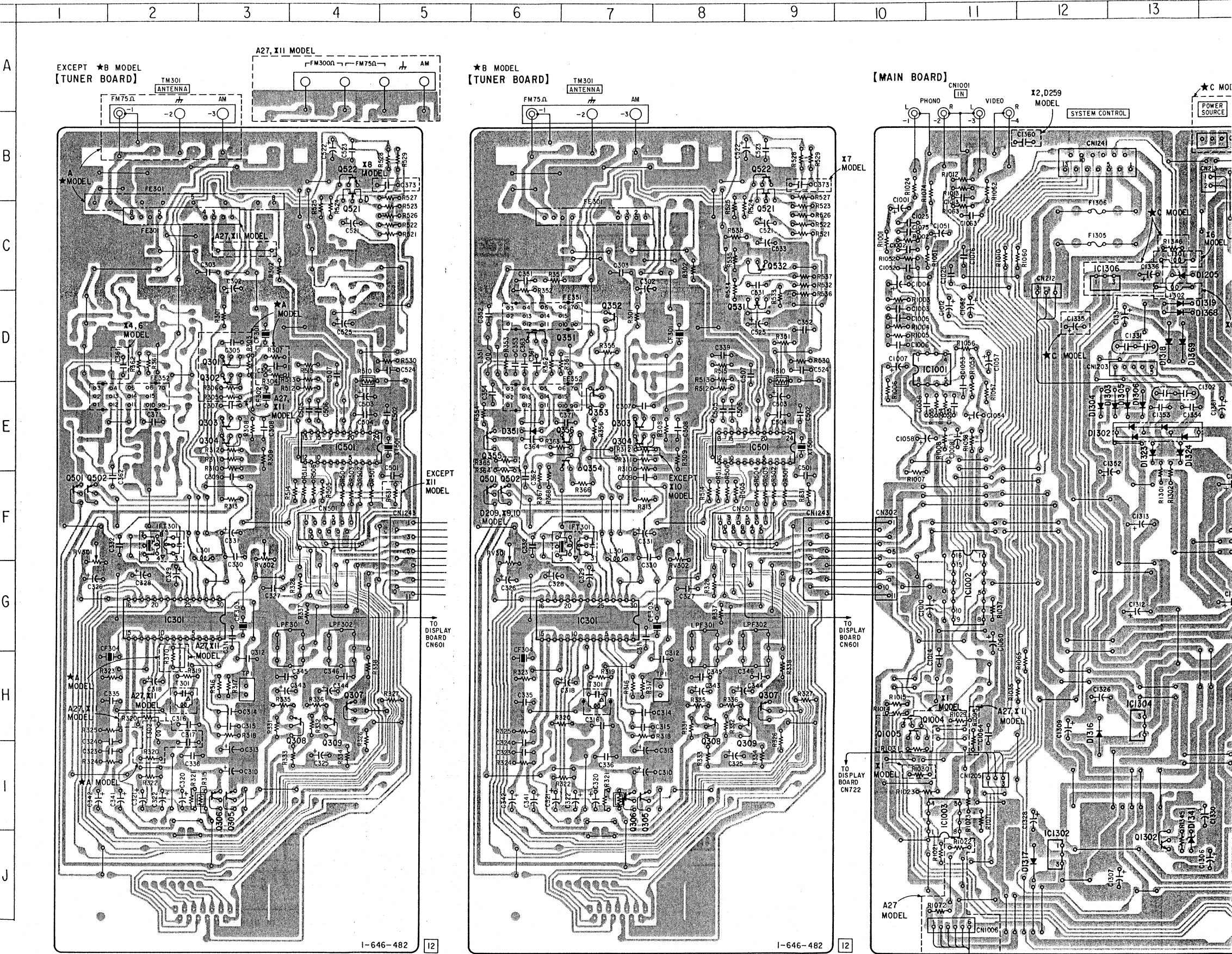
- — : Parts extracted from the component side.
- : Pattern on the side which is seen.

• Model name and destination shown by * 1 to * 11.

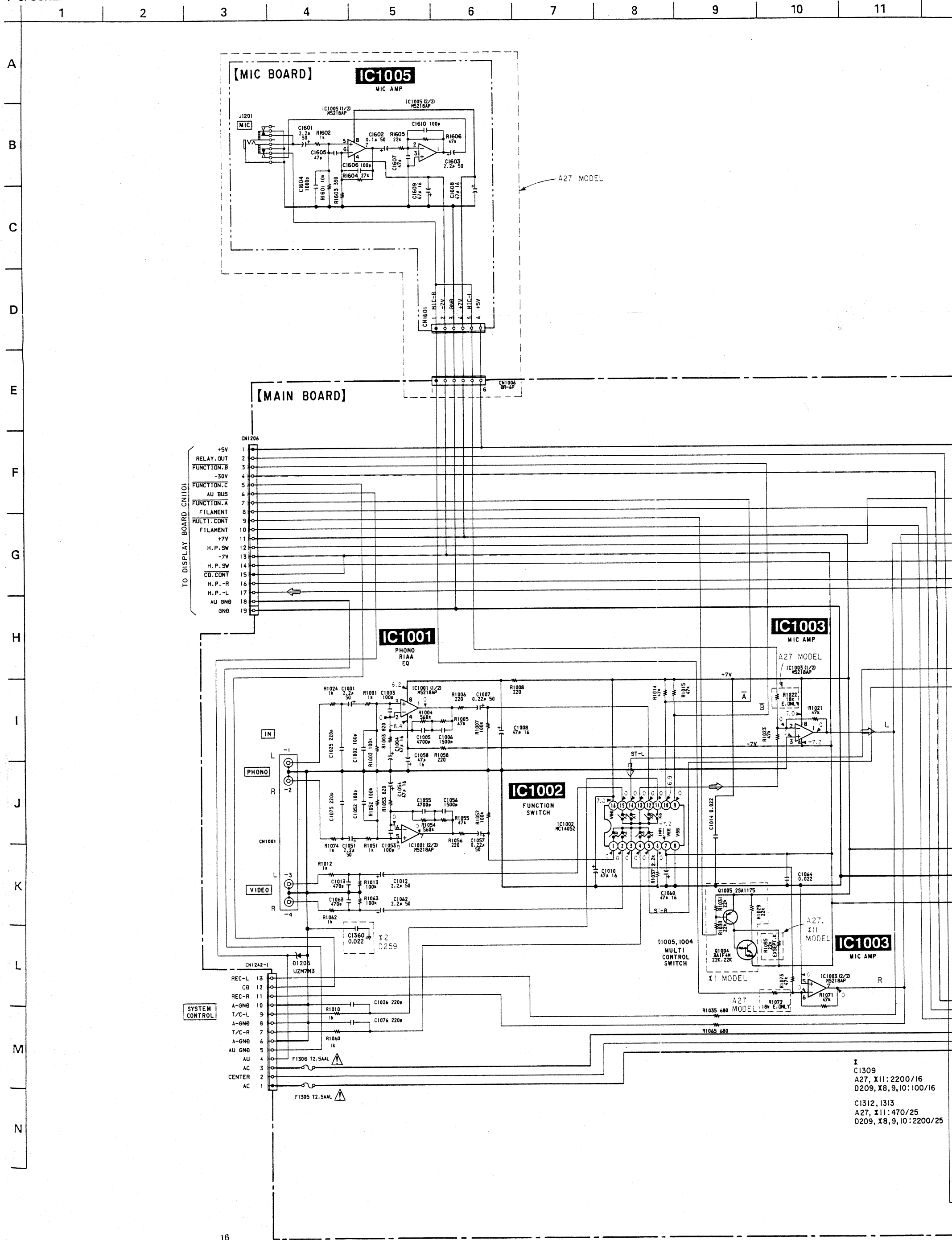
- * 1 : A27 : Australian
- * 2 : A27 : E, AU2
- * 3 : D209 : UK
- * 4 : D209 : Italian
- * 5 : D209 : East European
- * 6 : D209 : German
- * 7 : D209 : AEP, AE2
- * 8 : D259 : Italian
- * 9 : D259 : AEP, AE2
- * 10 : D259 : UK
- * 11 : D259 : Canadian
- ★ A : * 4, 6, 8
- ★ B : * 3, 5, 7, 9, 10
- ★ C : 209 : AEP, * 3, 6, D259 : AEP, * 10

AU2 : AUS (with in PHONO MODEL)
AE2 : AEP (with in PHONO MODEL)

4- 2. PRINTED WIRING BOARD — MAIN SECTION —

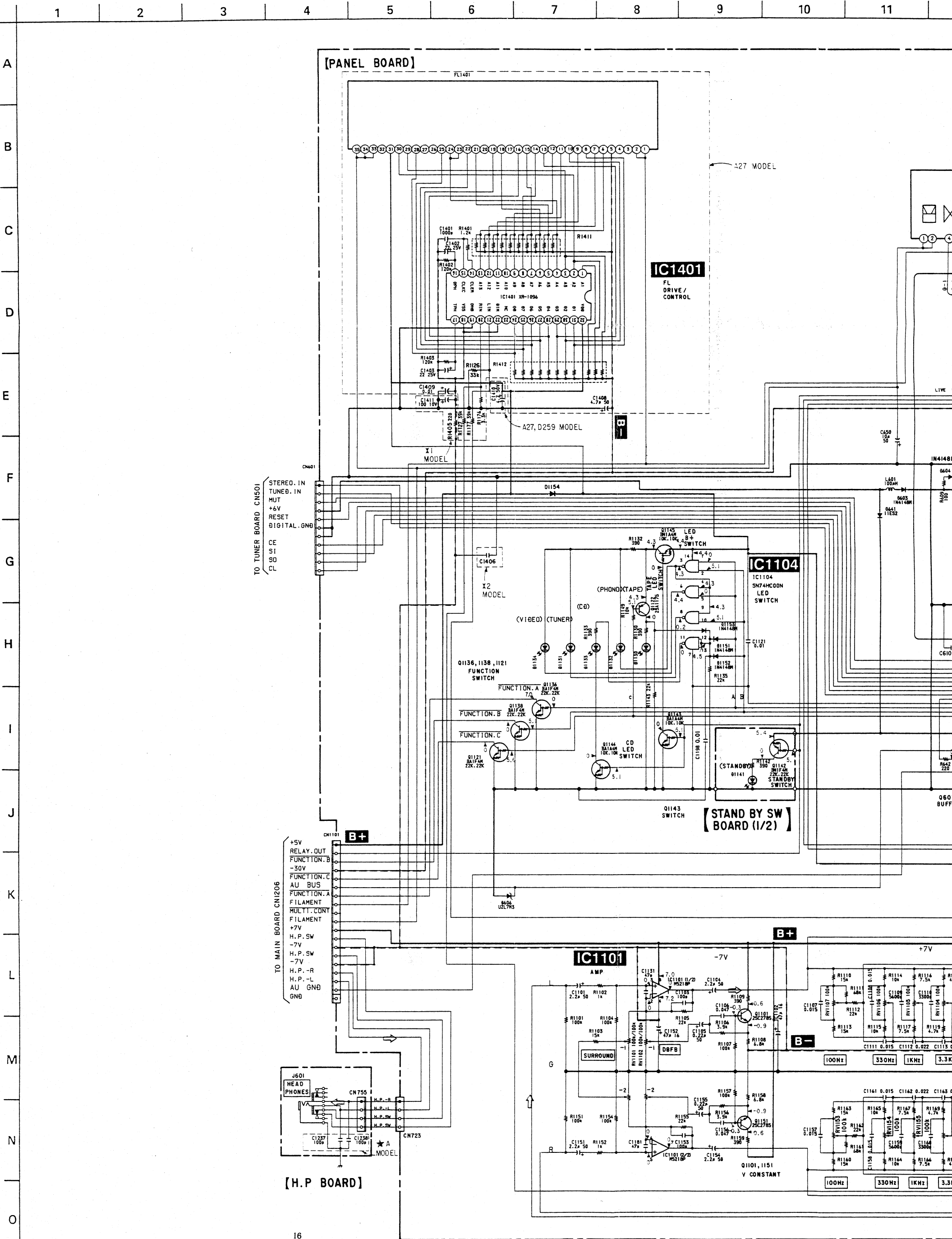


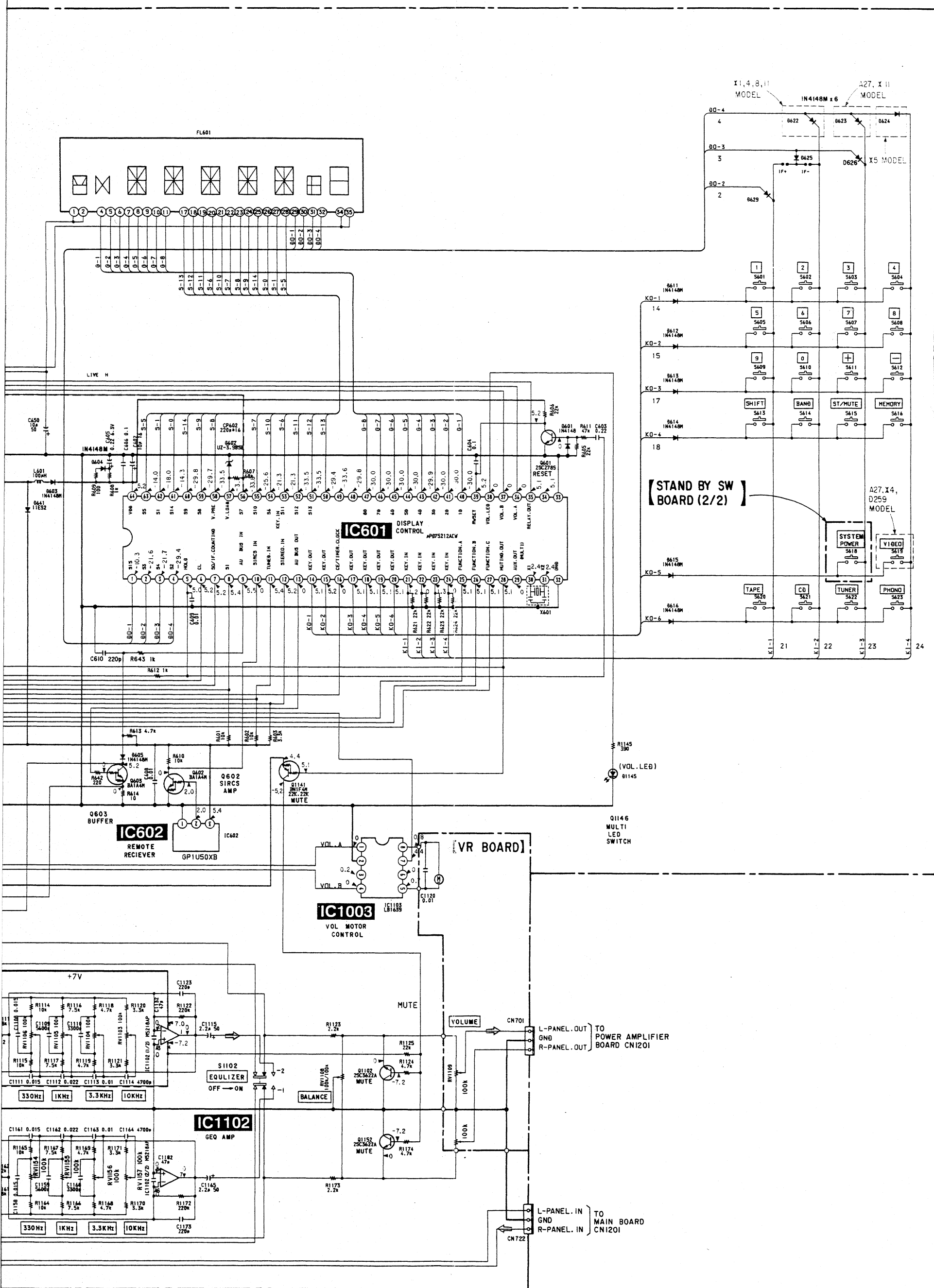
4-3. SCHEMATIC DIAGRAM — MAIN SECTION —







4-4. SCHEMATIC DIAGRAM — DISPLAY SECTION —










Note on Schematic Diagram :

- All capacitors are in μF unless otherwise noted. pF: μpF
50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and $\frac{1}{4}$ W or less unless otherwise specified.
-  : nonflammable resistor.
-  : fusible resistor.

Note:
The components identified by mark Δ or dotted line with mark Δ are critical for safety. Replace only with part number specified.

Note:
Les composants identifiés par une marque Δ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

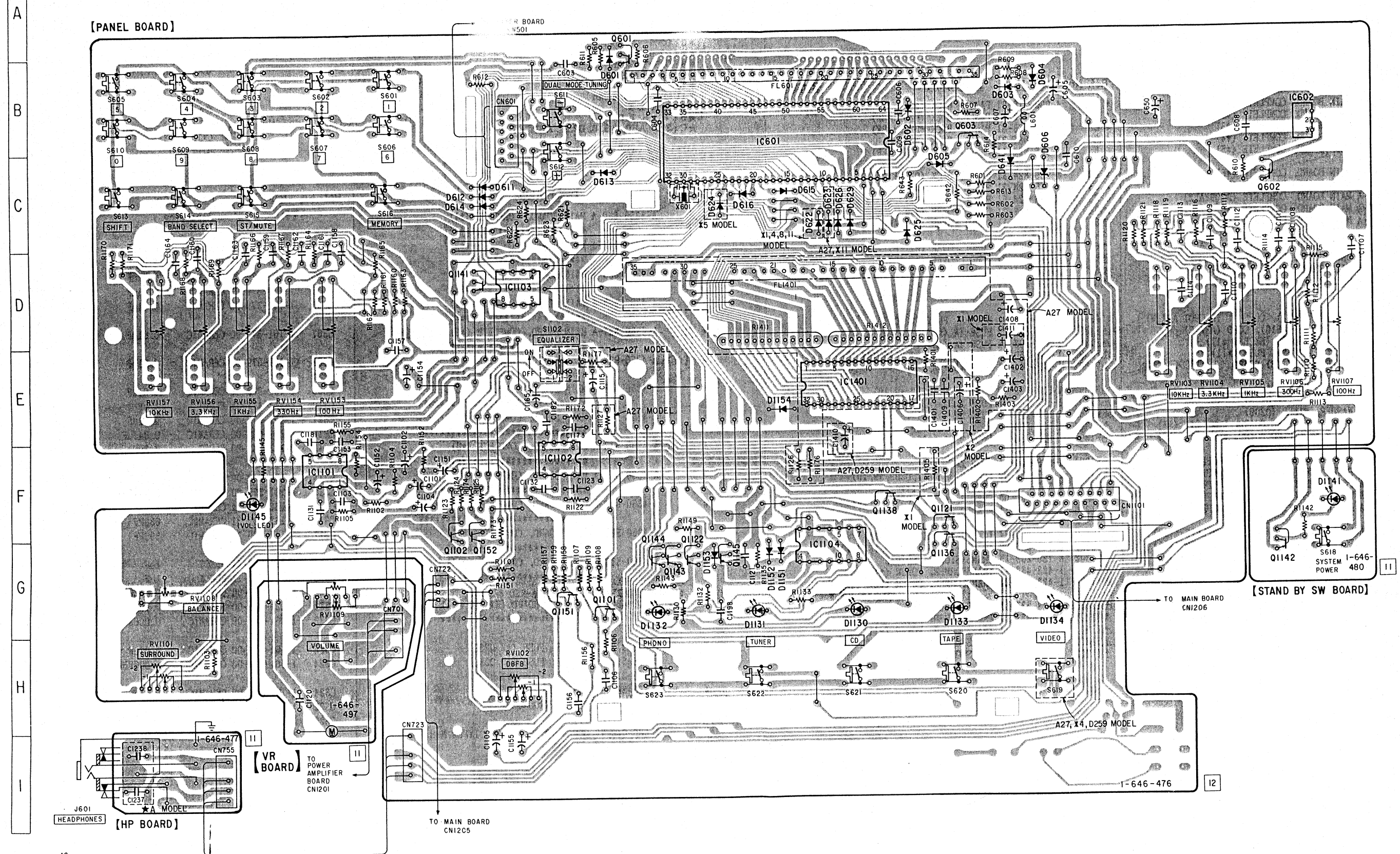
-  : adjustment for repair.
-  : B + Line.
-  : B - Line.
- no mark : FM
- Voltages are taken with a VOM (input impedance 10 M Ω).
Voltage variations may be noted due to normal production tolerances.
- Signal path.
 : FM
 : AM

- Model name and destination shown by * 1 to * 11.

- * 1 : A27 : Australian
- * 2 : A27 : E, AU2
- * 3 : D209 : UK
- * 4 : D209 : Italian
- * 5 : D209 : East European
- * 6 : D209 : German
- * 7 : D209 : AEP, AE2
- * 8 : D259 : Italian
- * 9 : D259 : AEP, AE2
- * 10 : D259 : UK
- * 11 : D259 : Canadian
- ★ A : * 4, 6, 8
- ★ B : * 3, 5, 7, 9, 10
- ★ C : 209 : AEP, * 3, 6, D259 : AEP, * 10

AU2 : AUS (with in PHONO MODEL)
AE2 : AEP (with in PHONO MODEL)

4-5. PRINTED WIRING BOARD — DISPLAY SECTION —															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15



● Semiconductor Location

Ref. No.	Location	Ref. No.	Location
D601	B-6	D1153	G-7
D602	B-9	D1154	E-8
D603	B-10		
D604	B-11	IC601	B-8
D605	C-10	IC602	B-13
D606	B-11	IC1101	F-3
D611	C-5	IC1102	F-6
D612	C-5	IC1103	D-5
D613	C-6	IC1104	G-8
D614	C-5	IC1401	E-9
D615	C-8		
D616	C-8	Q601	A-6
D622	C-8	Q602	C-13
D623	C-9	Q603	B-10
D624	C-8	Q1101	G-6
D625	C-9	Q1102	G-5
D626	C-9	Q1121	F-10
D629	C-9	Q1122	F-7
D641	C-10	Q1136	G-10
D1130	G-9	Q1138	F-9
D1131	G-8	Q1141	D-5
D1132	G-7	Q1142	G-13
D1133	G-10	Q1143	G-7
D1134	G-11	Q1144	F-7
D1141	F-14	Q1145	G-8
D1145	F-3	Q1151	G-6
D1151	G-8	Q1152	G-5
D1152	G-8		

Note on Mounting Diagram :

- : Parts extracted from the component side.
- ▨ : Pattern on the side which is seen.

● Model name and destination shown by * 1 to * 11.

* 1 : A27 : Australian

* 2 : A27 : E, AU2

* 3 : D209 : UK

* 4 : D209 : Italian

* 5 : D209 : East European

* 6 : D209 : German

* 7 : D209 : AEP, AE2

* 8 : D259 : Italian

* 9 : D259 : AEP, AE2

* 10 : D259 : UK

* 11 : D259 : Canadian

★ A : * 4, 6, 8

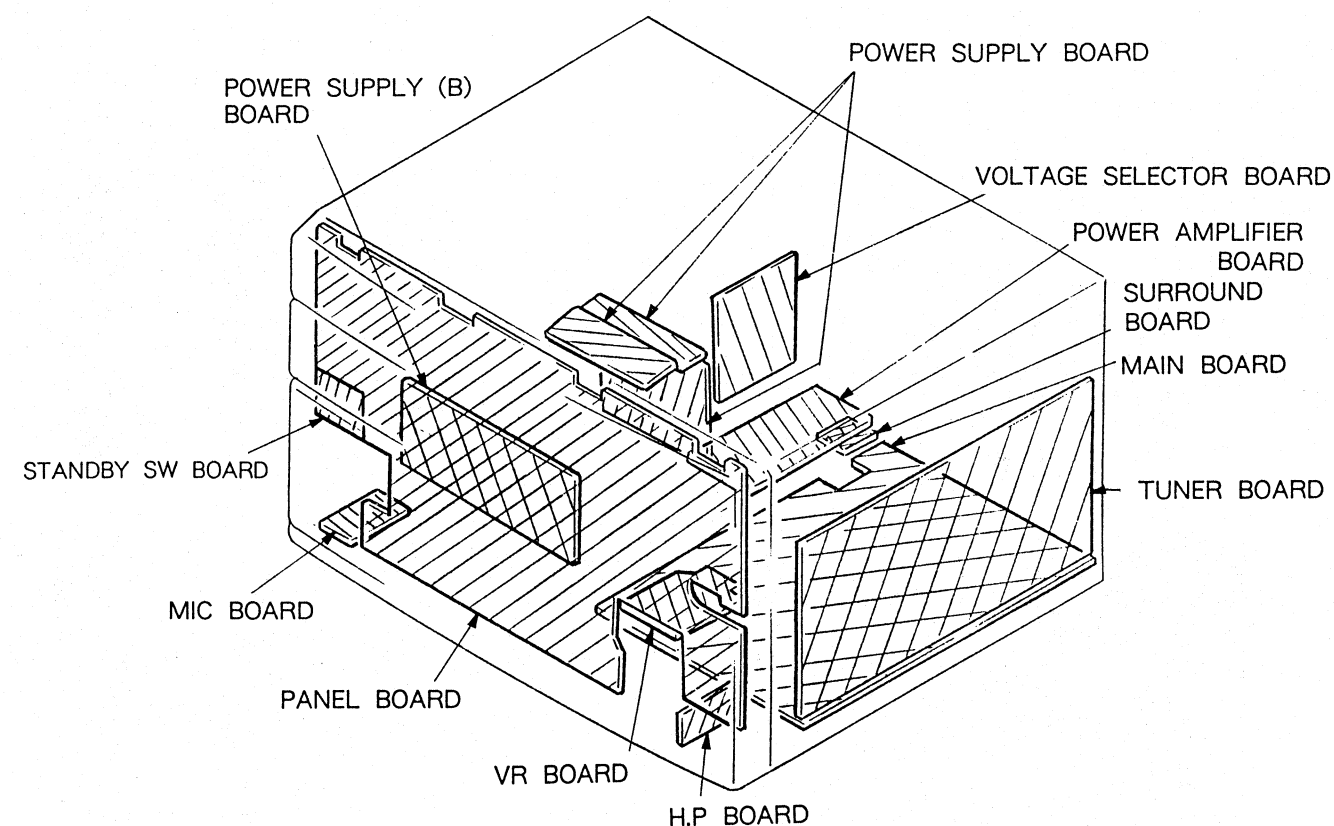
★ B : * 3, 5, 7, 9, 10

★ C : 209 : AEP, * 3, 6, D259 : AEP, * 10

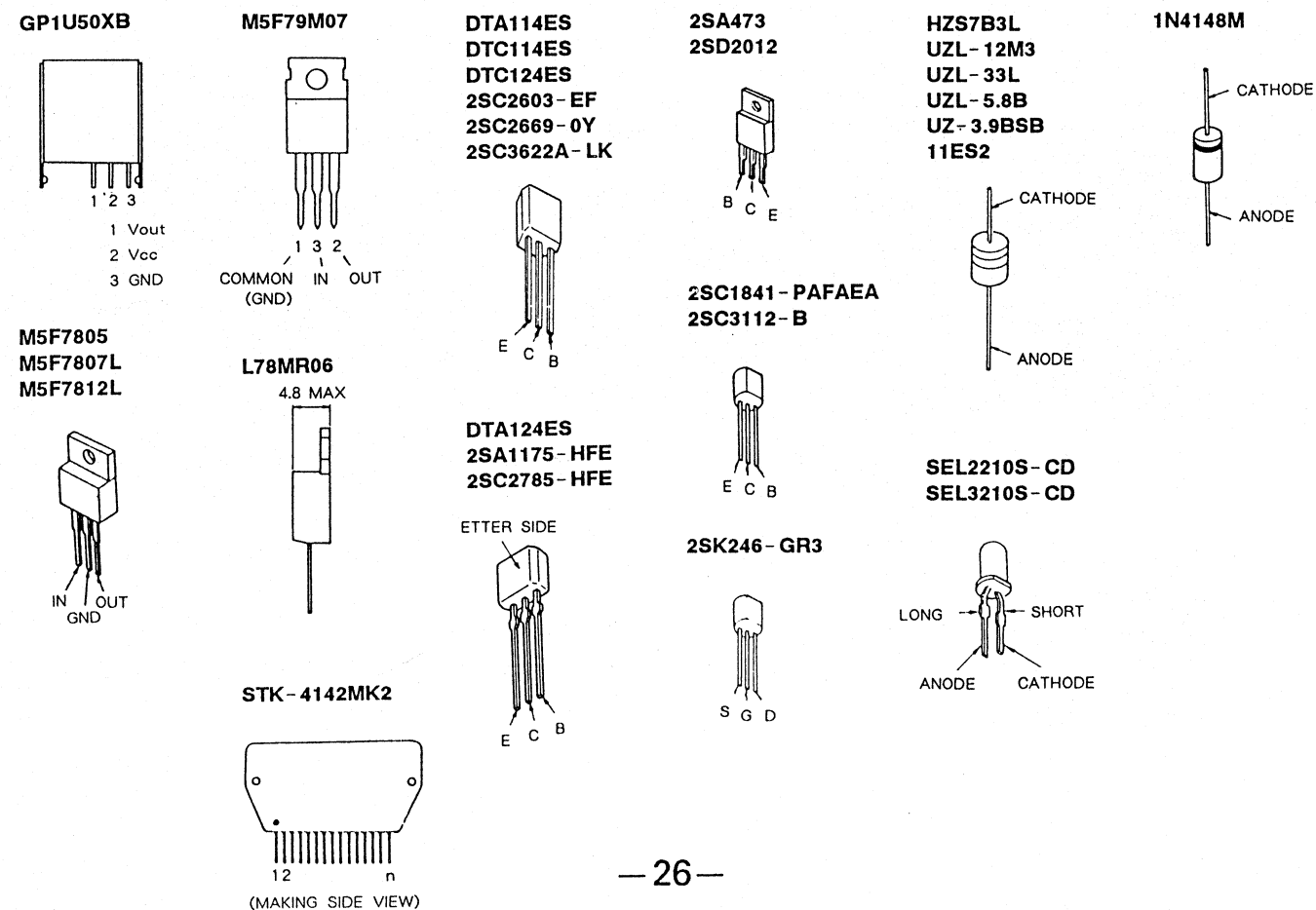
AU2 : AUS (with in PHONO MODEL)

AE2 : AEP (with in PHONO MODEL)

4-6. CIRCUIT BOARDS LOCATION



4-7. SEMICONDUCTOR LEAD LAYOUTS



SECTION 5 EXPLODED VIEWS

NOTE:

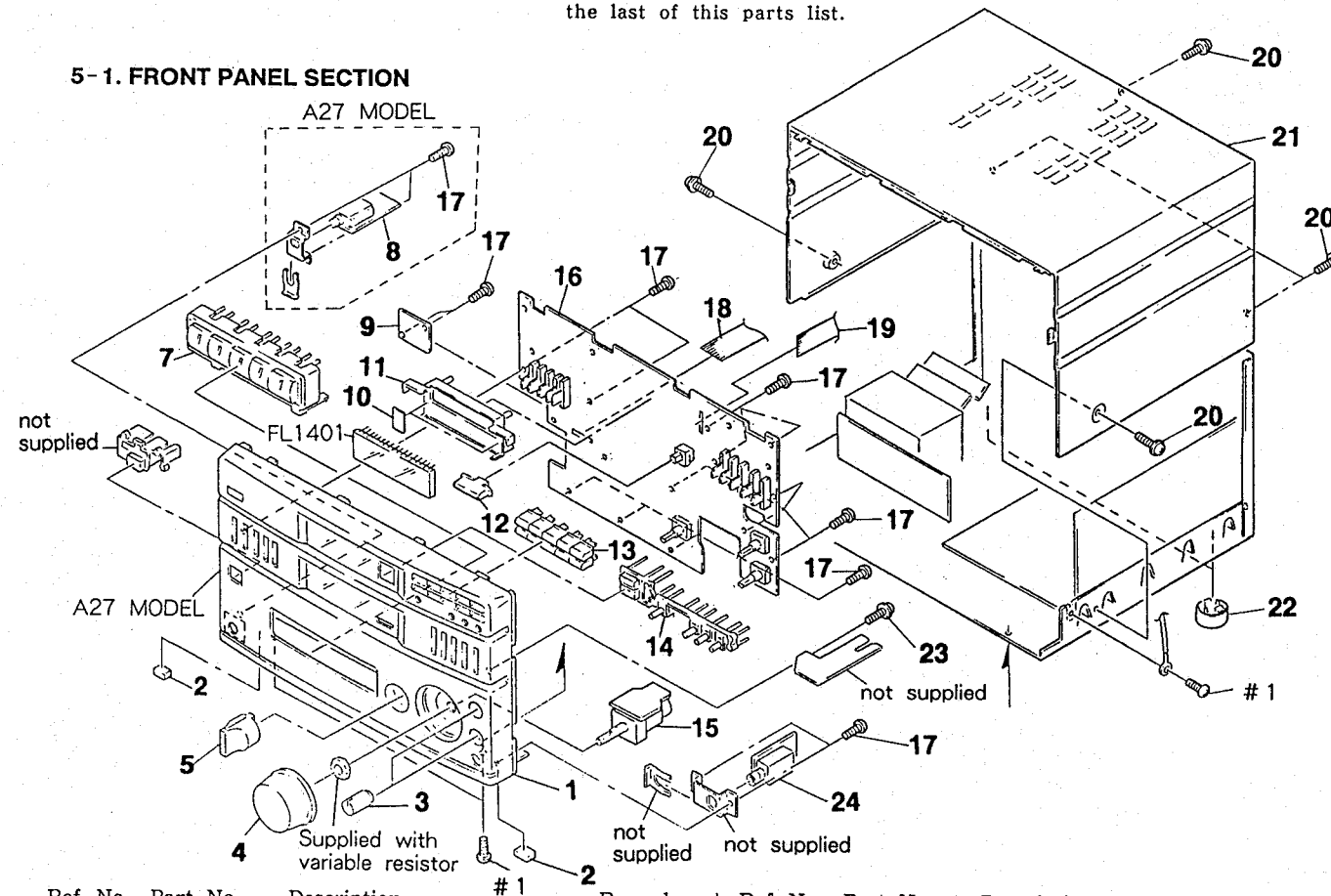
- -XX, -X mean standardized parts, so they may have some differences from the original one.
- Color Indication of Appearance Parts
Example:
KNOB, BALANCE (WHITE)...(RED)
↑ ↑
Parts color Cabinet's color

- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.
- Hardware (# mark) list is given in the last of this parts list.

- Model name and destination shown by *1 to *11.
- *1: A27: Australian
- *2: A27: E, AU2
- *3: D209: UK
- *4: D209: Italian
- *5: D209: East European
- *6: D209: German
- *7: D209: AEP, AE2
- *8: D259: Italian
- *9: D259: AEP, AE2

- *10: D259: UK
- *11: D259: Canadian
- ★A: *4, 6, 8
- ★B: *3, 5, 7, 9, 10
- ★C: 209: AEP, *3, 6, D259: AEP, *10
- AU2: AUS (with in PHONO MODEL)
- AE2: AEP (with in PHONO MODEL)

5-1. FRONT PANEL SECTION

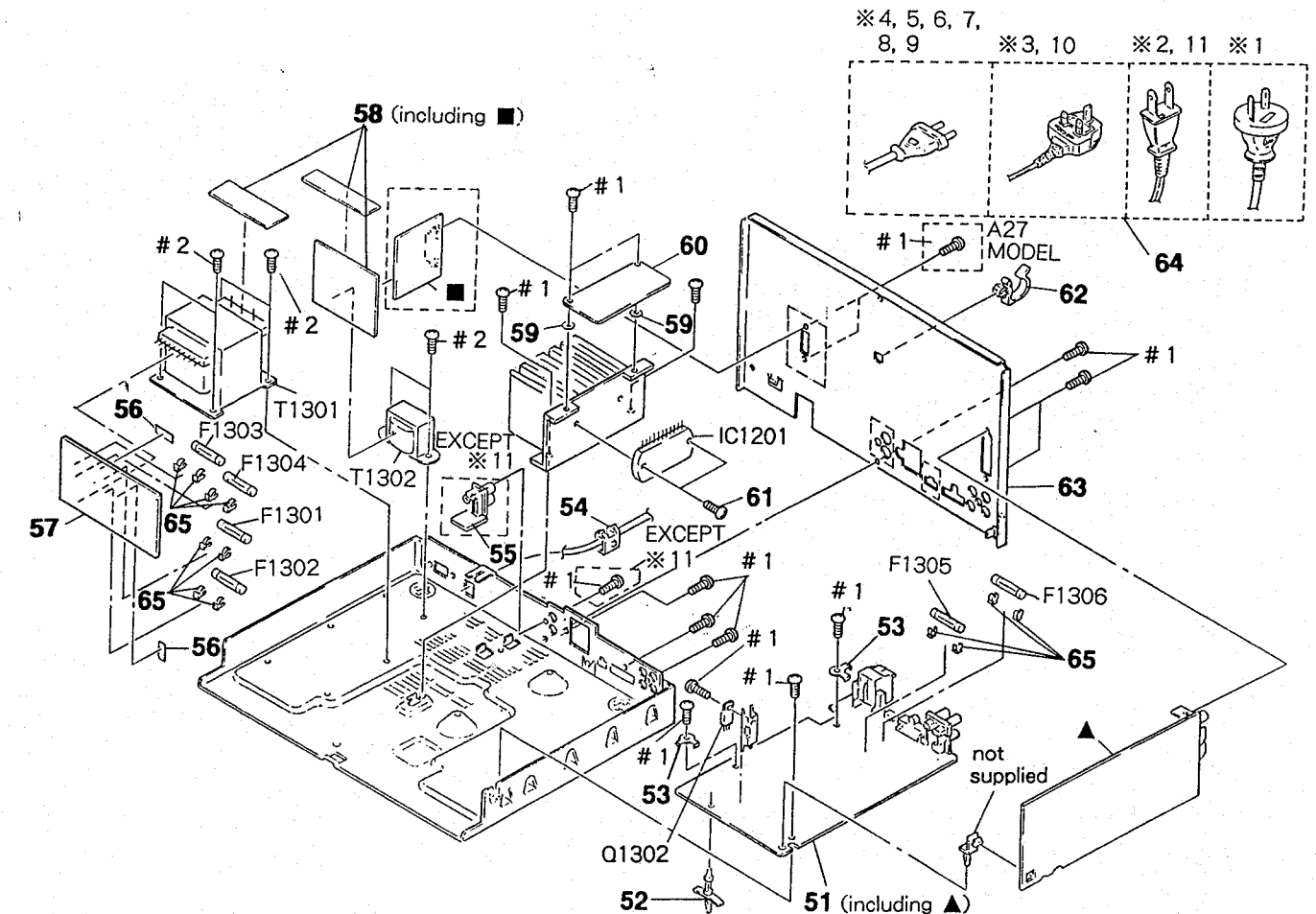


Ref. No.	Part No.	Description	Remarks
1	X-4943-180-1	PANEL ASSY, FRONT (*1)	
1	X-4943-182-1	PANEL ASSY, FRONT (D209)	
1	X-4943-242-2	PANEL ASSY, FRONT (*2)	
1	X-4943-243-2	PANEL ASSY, FRONT (D259)	
2	4-948-236-01	CUSHION (107)	
3	4-955-744-01	KNOB (BA) (*1, D209)	
3	4-955-744-21	KNOB (BA) (*2, D259)	
4	4-955-635-01	KNOB (V) (*1, D209)	
4	4-955-635-21	KNOB (V) (*2, D259)	
5	4-955-636-01	KNOB (DB) (*1, D209)	
5	4-955-636-22	KNOB (DB) (*2, D259)	
7	X-4943-179-1	BUTTON (FU) ASSY	
*8	1-646-479-11	MIC BOARD (A27)	
*9	1-646-480-11	STAND-BY SW BOARD	
*10	4-949-935-31	CUSHION (FL)	
*11	4-942-301-01	HOLDER, FL TUBE	
12	4-955-755-01	BUTTON (EQ) (*1, D209)	
12	4-955-755-11	BUTTON (EQ) (*2, D259)	
13	4-955-741-01	BUTTON (PR) (*1, D209)	
13	4-955-741-21	BUTTON (PR) (*2, D259)	
14	4-955-745-01	BUTTON (ST)	
*15	1-646-497-11	VR BOARD	
*16	A-4356-640-A	PANEL BOARD, COMPLETE (*1)	

Ref. No.	Part No.	Description	Remarks
*16	A-4356-736-A	PANEL BOARD, COMPLETE (*2)	
*16	A-4356-623-A	PANEL BOARD, COMPLETE (*3)	
*16	A-4356-930-A	PANEL BOARD, COMPLETE (*4)	
*16	A-4360-822-A	PANEL BOARD, COMPLETE (*5)	
*16	A-4356-924-A	PANEL BOARD, COMPLETE (*6)	
*16	A-4356-608-A	PANEL BOARD, COMPLETE (*7)	
*16	A-4360-541-A	PANEL BOARD, COMPLETE (*8)	
*16	A-4360-531-A	PANEL BOARD, COMPLETE (*9)	
*16	A-4360-520-A	PANEL BOARD, COMPLETE (*10)	
*16	A-4360-509-A	PANEL BOARD, COMPLETE (*11)	
17	4-951-620-01	SCREW (2.6X8), +BVTP	
18	1-590-578-11	WIRE, FLAT TYPE (19 CORE)	
19	1-590-576-11	WIRE, FLAT TYPE (11 CORE) (A27, D259)	
19	1-590-576-21	WIRE, FLAT TYPE (11 CORE) (D209)	
20	3-704-366-01	SCREW (CASE) (M3X8)	
*21	4-955-759-11	CASE (*1, D209)	
*21	4-955-759-51	CASE (*2, D259)	
22	4-933-601-01	FOOT (*2, D259)	
22	X-4941-228-1	FOOT ASSY (*1, D209)	
23	4-957-577-01	SCREW PTP WH (2.6X8) (DIA. 10) (*1, D209)	
23	4-957-577-11	SCREW PTP WH (2.6X8) (DIA. 10) (*2, D259)	
*24	1-646-477-11	H.P. BOARD	
	FL1401	1-519-648-21	INDUCTOR TUBE, FLUORESCENT (A27)

5-2. BACK PANEL SECTION

- ▲: TUNER BOARD
- : VOLTAGE SELECTOR BOARD



• CAUTION

Be sure to use insulation sheet (A-4-959-364-01) when replacing power transformer because it is safely related part.

MAIN SURROUND

SECTION 6 ELECTRICAL PARTS LIST

• Model name and destination shown by * 1 to * 11.
* 1: A27: Australian
* 2: A27: E, AU2
* 3: D209: UK
* 4: D209: Italian
* 5: D209: East European
* 6: D209: German
* 7: D209: AEP, AE2
* 8: D259: Italian
* 9: D259: AEP, AE2
* 10: D259: UK
* 11: D259: Canadian
★A: * 4, 6, 8
★B: * 3, 5, 7, 9, 10
★C: 209: AEP, * 3, 6, D259: AEP, * 10
AU2: AUS (with in PHONO MODEL)
AE2: AEP (with in PHONO MODEL)

NOTE:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX, -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
All resistors are in ohms.
METAL: metal-film resistor
METAL OXIDE: Metal Oxide-film resistor
F: nonflammable

- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- SEMICONDUCTORS
In each case, u: μ , for example:
uA...: μ A..., uPA..., μ PA...,
uPB..., μ PB..., uPC..., μ PC...,
uPD..., μ PD...
- CAPACITORS:
uF: μ F
- COILS
uH: μ H

Ref. No.	Part No.	Description	Remarks	Ref. No.	Part No.	Description	Remarks
* 51	A-4356-650-A	MAIN BOARD, COMPLETE (*1)		* 63	4-955-778-91	PANEL, BACK (*6)	
* 51	A-4356-742-A	MAIN BOARD, COMPLETE (*2)		* 63	4-955-778-11	PANEL, BACK (D209:AEP)	
* 51	A-4356-630-A	MAIN BOARD, COMPLETE (*3)		* 63	4-955-778-81	PANEL, BACK (D209:AE2)	
* 51	A-4356-933-A	MAIN BOARD, COMPLETE (*4)		* 63	4-955-824-31	PANEL, BACK (*8)	
* 51	A-4360-821-A	MAIN BOARD, COMPLETE (*5)		* 63	4-955-824-11	PANEL, BACK (D259:AEP)	
* 51	A-4356-926-A	MAIN BOARD, COMPLETE (*6)		* 63	4-955-824-81	PANEL, BACK (D259:AE2)	
* 51	A-4356-618-A	MAIN BOARD, COMPLETE (D209:AEP)		* 63	4-955-824-21	PANEL, BACK (*10)	
* 51	A-4356-928-A	MAIN BOARD, COMPLETE (D209:AE2)		* 63	4-955-824-51	PANEL, BACK (*11)	
* 51	A-4360-543-A	MAIN BOARD, COMPLETE (*8)		△64	1-696-848-21	CORD, POWER (*1)	
* 51	A-4360-534-A	MAIN BOARD, COMPLETE (D259:AEP)		△64	1-690-608-11	CORD, POWER (A27:AU2)	
* 51	A-4360-538-A	MAIN BOARD, COMPLETE (D259:AE2)		△64	1-575-653-11	CORD, POWER (A27:E)	
* 51	A-4360-523-A	MAIN BOARD, COMPLETE (*10)		△64	1-696-570-21	CORD, POWER (*3, 10)	
* 51	A-4360-511-A	MAIN BOARD, COMPLETE (*11)		△64	1-575-651-11	CORD, POWER (*4, 5, 6, 7, 8, 9)	
* 52	4-954-051-51	HOLDER, PC BOARD		△64	1-690-609-21	CORD, POWER (*11)	
* 53	4-942-204-01	PLATE, GROUND		65	1-533-217-31	HOLDER, FUSE (*1, D209)	
* 54	3-703-244-00	BUSHING (2104), CORD (EXCEPT A27:E)		* 65	1-533-213-11	HOLDER, FUSE (*2, D259)	
* 54	3-703-571-11	BUSHING (S) (4516), CORD (A27:E)		△F1301	1-532-350-00	FUSE 4A (A27, D209, *9, 10)	
* 55	1-646-484-11	SURROUND BOARD (EXCEPT *11)		△F1301	1-576-108-11	FUSE 4A (*8, 11)	
* 56	3-701-946-26	LABEL (4A125V), FUSE (*11)		△F1302	1-532-350-00	FUSE 4A (A27, D209, *9, 10)	
* 57	1-646-478-11	POWER SUPPLY (B) BOARD		△F1302	1-576-108-11	FUSE 4A (*8, 11)	
* 58	1-646-474-11	POWER SUPPLY BOARD		△F1303	1-532-203-00	FUSE 2A (D209, *9, 10)	
* 59	3-330-034-01	WASHER (*2, D259)		△F1303	1-532-286-00	FUSE 2.5A (A27, D209, *9, 10)	
* 59	3-564-542-00	WASHER, FIBER (D209)		△F1303	1-576-104-11	FUSE 2A (*8)	
* 60	A-4356-649-A	POWER AMPLIFIER BOARD, COMPLETE (*1)		△F1304	1-532-203-00	FUSE 2A (D209, *9, 10)	
* 60	A-4356-749-A	POWER AMPLIFIER BOARD, COMPLETE (*2)		△F1304	1-532-286-00	FUSE 2.5A (A27, D209, *9, 10)	
* 60	A-4356-628-A	POWER AMPLIFIER BOARD, COMPLETE (*3)		△F1304	1-576-104-11	FUSE 2A (*8)	
* 60	A-4356-935-A	POWER AMPLIFIER BOARD, COMPLETE (*4, 6)		△F1305	1-532-286-00	FUSE 2.5A (A27, D209, *9, 10)	
* 60	A-4356-616-A	POWER AMPLIFIER BOARD, COMPLETE (*5, 7)		△F1305	1-576-105-11	FUSE 2.5A (*8, 11)	
* 60	A-4360-546-A	POWER AMPLIFIER BOARD, COMPLETE (*8)		△F1306	1-532-286-00	FUSE 2.5A (A27, D209, *9, 10)	
* 60	A-4360-537-A	POWER AMPLIFIER BOARD, COMPLETE (*9)		△F1306	1-576-105-11	FUSE 2.5A (*8, 11)	
* 60	A-4360-527-A	POWER AMPLIFIER BOARD, COMPLETE (*10)		IC1201	8-749-900-24	IC STK-4162MK2 (A27, *11)	
* 60	A-4360-516-A	POWER AMPLIFIER BOARD, COMPLETE (*11)		IC1201	8-749-900-96	IC STK-4162MK2 (D209, *8, 9, 10)	
* 61	4-928-635-11	SCREW, +BV (2.6X16) TAPPING		Q1302	8-729-209-15	TRANSISTOR 2SD2012	
* 62	4-949-235-01	HOLDER (*2, 4, 5, 6, 7, 9, 11)		△T1301	1-423-438-11	TRANSFORMER, POWER (*1)	
* 63	4-955-781-11	PANEL, BACK (*1)		△T1301	1-423-438-21	TRANSFORMER, POWER (*2)	
* 63	4-955-824-91	PANEL, BACK (A27:E)		△T1301	1-423-437-11	TRANSFORMER, POWER (D209)	
* 63	4-955-824-61	PANEL, BACK (A27:AU2)		△T1301	1-423-437-21	TRANSFORMER, POWER (*8, 9, 10)	
* 63	4-955-778-21	PANEL, BACK (*3)		△T1301	1-423-431-11	TRANSFORMER, POWER (*11)	
* 63	4-955-778-31	PANEL, BACK (*4)		△T1302	1-449-723-31	TRANSFORMER, POWER (EXCEPT *11)	
* 63	4-955-778-41	PANEL, BACK (*5)		△T1302	1-450-786-11	TRANSFORMER, POWER (*11)	

Note:

The components identified by mark Δ or dotted line with mark Δ are critical for safety. Replace only with part number specified.

Note:

Les composants identifiés par une marque Δ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

Ref. No.	Part No.	Description	Remarks	Ref. No.	Part No.	Description	Remarks
*	A-4356-650-A	MAIN BOARD, COMPLETE (*1)				< CAPACITOR >	
*	A-4356-742-A	MAIN BOARD, COMPLETE (*2)		C301	1-161-379-00	CERAMIC 0.01uF	20% 25V (★:A)
*	A-4356-630-A	MAIN BOARD, COMPLETE (*3)		C302	1-124-477-11	ELECT 47uF	20% 25V
*	A-4356-933-A	MAIN BOARD, COMPLETE (*4)		C303	1-161-379-00	CERAMIC 0.01uF	20% 25V
*	A-4360-821-A	MAIN BOARD, COMPLETE (*5)		C305	1-161-379-00	CERAMIC 0.01uF	20% 25V (★:A)
*	A-4356-926-A	MAIN BOARD, COMPLETE (*6)		C306	1-161-379-00	CERAMIC 0.01uF	20% 25V (★:A)
*	A-4356-618-A	MAIN BOARD, COMPLETE (D209:AEP)		C307	1-161-379-00	CERAMIC 0.01uF	20% 25V (EXCEPT *1)
*	A-4356-928-A	MAIN BOARD, COMPLETE (D209:AE2)		C308	1-161-379-00	CERAMIC 0.01uF	20% 25V (EXCEPT *1)
*	A-4360-543-A	MAIN BOARD, COMPLETE (*8)		C309	1-161-379-00	CERAMIC 0.01uF	20% 25V
*	A-4360-534-A	MAIN BOARD, COMPLETE (D259:AEP)		C310	1-124-477-11	ELECT 47uF	20% 25V
*	A-4360-538-A	MAIN BOARD, COMPLETE (D259:AE2)		C311	1-161-379-00	CERAMIC 0.01uF	20% 25V
*	A-4360-523-A	MAIN BOARD, COMPLETE (*10)		C312	1-101-006-00	CERAMIC 0.047uF	50V
*	A-4360-511-A	MAIN BOARD, COMPLETE (*11)		C313	1-123-382-00	ELECT 3.3uF	20% 100V
*	1-646-484-11	SURROUND BOARD (EXCEPT *11)		C314	1-161-379-00	CERAMIC 0.01uF	20% 25V
*	1-533-213-11	HOLDER, FUSE (*2, D259)		C315	1-161-329-00	CERAMIC 0.0068uF	30% 16V
*	1-533-213-31	HOLDER, FUSE (*2, D259)		C316	1-162-282-31	CERAMIC 100PF	10% 50V
*	1-533-217-31	HOLDER, FUSE (*1, D209)		C317	1-162-292-31	CERAMIC 680PF	10% 50V (*4, 6)
*	1-533-293-11	FUSE HOLDER (*2, D259)		C317	1-162-289-31	CERAMIC 390PF	10% 50V (*8)
*	4-942-204-01	PLATE, GROUND		C318	1-124-903-11	ELECT 1uF	20% 50V
	7-685-646-79	SCREW +BVTP 3X8 TYPE2 N-S (*6)		C320	1-124-903-11	ELECT 1uF	20% 50V
				C321	1-124-902-00	ELECT 0.47uF	20% 50V
				C322	1-124-463-00	ELECT 0.1uF	20% 50V
				C323	1-161-329-00	CERAMIC 0.0068uF	20% 16V (EXCEPT *11)
				C323	1-161-379-00	CERAMIC 0.01uF	20% 25V (*11)
				C324	1-161-329-00	CERAMIC 0.0068uF	20% 16V (EXCEPT *11)
				C324	1-161-379-00	CERAMIC 0.01uF	20% 25V (*11)
				C325	1-124-477-11	ELECT 47uF	20% 25V
				C326	1-124-907-11	ELECT 10uF	20% 50V
				C327	1-161-379-00	CERAMIC 0.01uF	20% 25V
				C328	1-124-463-00	ELECT 0.1uF	20% 50V

Note:

The components identified by mark Δ or dotted line with mark Δ are critical for safety. Replace only with part number specified.

Note:

Les composants identifiés par une marque Δ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

When indicating parts by reference number, please include the board name.

MAIN	SURROUND
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Ref. No.	Part No.	Description	Remarks
C329	1-124-927-11	ELECT	4.7uF 20% 100V
C330	1-161-379-00	CERAMIC	0.01uF 20% 25V
C331	1-126-176-11	ELECT	220uF 20% 10V
C332	1-161-379-00	CERAMIC	0.01uF 20% 25V
C335	1-161-379-00	CERAMIC	0.01uF 20% 25V
C336	1-161-379-00	CERAMIC	0.01uF 20% 25V
C339	1-162-210-31	CERAMIC	30PF 5% 50V (★:B)
C341	1-123-382-00	ELECT	3.3uF 20% 100V
C342	1-123-382-00	ELECT	3.3uF 20% 100V
C343	1-123-382-00	ELECT	3.3uF 20% 100V
C344	1-123-382-00	ELECT	3.3uF 20% 100V
C345	1-161-375-00	CERAMIC	0.0022uF 20% 50V
C346	1-161-375-00	CERAMIC	0.0022uF 20% 50V
C351	1-161-494-00	CERAMIC	0.022uF 25V (★:B)
C352	1-102-120-00	CERAMIC	0.0018uF 10% 50V (★:B)
C353	1-161-374-11	CERAMIC	0.0015uF 20% 50V (★:B)
C354	1-161-494-00	CERAMIC	0.022uF 25V (★:B)
C361	1-164-098-11	CERAMIC	0.047uF 12V
C361	1-161-379-00	CERAMIC	0.01uF 20% 25V (*4, 6)
C362	1-161-494-00	CERAMIC	0.022uF 25V
C363	1-164-159-11	CERAMIC	0.1uF 50V (★:B)
C364	1-161-494-00	CERAMIC	0.022uF 25V (★:B)
C371	1-162-198-31	CERAMIC	8.2PF 10% 50V (EXCEPT ★:B)
C371	1-162-196-31	CERAMIC	5.6PF 10% 50V (★:B)
C373	1-162-288-31	CERAMIC	330PF 10% 50V (*7, *8)
C501	1-102-961-00	CERAMIC	27PF 5% 50V
C502	1-102-961-00	CERAMIC	27PF 5% 50V
C503	1-124-477-11	ELECT	47uF 20% 25V
C504	1-161-379-00	CERAMIC	0.01uF 20% 25V
C505	1-161-379-00	CERAMIC	0.01uF 20% 25V
C506	1-161-379-00	CERAMIC	0.01uF 20% 25V
C507	1-161-379-00	CERAMIC	0.01uF 20% 25V
C521	1-124-925-11	ELECT	2.2uF 20% 100V
C522	1-124-463-00	ELECT	0.1uF 20% 50V
C523	1-161-379-00	CERAMIC	0.01uF 20% 25V
C524	1-161-379-00	CERAMIC	0.01uF 20% 25V
C525	1-124-477-11	ELECT	47uF 20% 25V (EXCEPT *5)
C525	1-126-101-11	ELECT	100uF 20% 16V (*5)
C531	1-136-173-00	FILM	0.47uF 5% 50V (★:B)
C532	1-161-494-00	CERAMIC	0.022uF 25V (★:B)
C533	1-124-463-00	ELECT	0.1uF 20% 50V (★:B)
C1001	1-124-925-11	ELECT	2.2uF 20% 100V
C1002	1-162-282-31	CERAMIC	100PF 10% 50V
C1003	1-162-282-31	CERAMIC	100PF 10% 50V
C1004	1-124-477-11	ELECT	47uF 20% 25V
C1005	1-161-377-00	CERAMIC	0.0047uF 20% 16V
C1006	1-161-374-11	CERAMIC	0.0015uF 20% 50V
C1007	1-124-464-11	ELECT	0.22uF 20% 50V
C1008	1-124-477-11	ELECT	47uF 20% 25V
C1010	1-124-477-11	ELECT	47uF 20% 25V
C1012	1-124-925-11	ELECT	2.2uF 20% 100V

Ref. No.	Part No.	Description	Remarks
C1013	1-162-290-31	CERAMIC	470PF 10% 50V
C1014	1-161-494-00	CERAMIC	0.022uF 25V
C1025	1-162-286-31	CERAMIC	220PF 10% 50V
C1026	1-162-286-31	CERAMIC	220PF 10% 50V
C1051	1-124-925-11	ELECT	2.2uF 20% 100V
C1052	1-162-282-31	CERAMIC	100PF 10% 50V
C1053	1-162-282-31	CERAMIC	100PF 10% 50V
C1054	1-124-477-11	ELECT	47uF 20% 25V
C1055	1-161-377-00	CERAMIC	0.0047uF 20% 16V
C1056	1-161-374-11	CERAMIC	0.0015uF 20% 50V
C1057	1-124-464-11	ELECT	0.22uF 20% 50V
C1058	1-124-477-11	ELECT	47uF 20% 25V
C1060	1-124-477-11	ELECT	47uF 20% 25V
C1062	1-124-925-11	ELECT	2.2uF 20% 100V
C1063	1-162-290-31	CERAMIC	470PF 10% 50V
C1064	1-161-494-00	CERAMIC	0.022uF 25V
C1075	1-162-286-31	CERAMIC	220PF 10% 50V
C1076	1-162-286-31	CERAMIC	220PF 10% 50V
C1212	1-124-916-11	ELECT	22uF 20% 63V
C1213	1-124-916-11	ELECT	22uF 20% 63V
C1221	1-126-101-11	ELECT	100uF 20% 16V
C1222	1-126-176-11	ELECT	220uF 20% 10V
C1223	1-126-176-11	ELECT	220uF 20% 10V
C1245	1-101-006-00	CERAMIC	0.047uF 50V (★:A)
C1246	1-101-006-00	CERAMIC	0.047uF 50V (★:A)
C1247	1-101-006-00	CERAMIC	0.047uF 50V (★:A)
C1248	1-101-006-00	CERAMIC	0.047uF 50V (★:A)
C1249	1-161-494-00	CERAMIC	0.022uF 25V (★:A)
C1250	1-161-494-00	CERAMIC	0.022uF 25V (★:A)
C1262	1-124-916-11	ELECT	22uF 20% 63V
C1263	1-124-916-11	ELECT	22uF 20% 63V
C1294	1-161-494-00	CERAMIC	0.022uF 25V (★:A)
C1302	1-102-394-11	CERAMIC	0.01uF 250V
C1304	1-126-224-11	ELECT	4700uF 20% 42V
C1305	1-126-224-11	ELECT	4700uF 20% 42V
C1306	1-124-477-11	ELECT	47uF 20% 25V
C1307	1-124-893-11	ELECT	2200uF 20% 10V
C1308	1-126-101-11	ELECT	100uF 20% 16V
C1309	1-124-556-11	ELECT	2200uF 20% 16V (A27, *11)
C1309	1-126-101-11	ELECT	100uF 20% 16V (D209, *8, 9, 10)
C1312	1-124-564-11	ELECT	4700uF 20% 25V (A27, *11)
C1312	1-124-563-11	ELECT	2200uF 20% 25V (D209, *8, 9, 10)
C1313	1-124-564-11	ELECT	4700uF 20% 25V (A27, *11)
C1313	1-124-563-11	ELECT	2200uF 20% 25V (D209, *8, 9, 10)
C1319	1-124-463-00	ELECT	0.1uF 20% 50V
C1320	1-124-907-11	ELECT	10uF 20% 50V
C1321	1-161-379-00	CERAMIC	0.01uF 20% 25V

MAIN SURROUND

Ref. No.	Part No.	Description	Remarks
C1322	1-161-379-00	CERAMIC 0.01uF	20% 25V
C1324	1-124-907-11	ELECT 10uF	20% 50V
C1326	1-124-907-11	ELECT 10uF	20% 50V
C1328	1-124-907-11	ELECT 10uF	20% 50V
C1330	1-126-101-11	ELECT 100uF	20% 16V
C1331	1-102-394-11	CERAMIC 0.01uF	250V
C1335	1-124-907-11	ELECT 10uF	20% 50V (★:C)
C1336	1-126-101-11	ELECT 100uF	20% 16V (★:C)
C1341	1-124-907-11	ELECT 10uF	20% 50V
C1346	1-124-925-11	ELECT 2.2uF	20% 100V
C1351	1-124-122-11	ELECT 100uF	20% 50V
C1352	1-126-105-11	ELECT 1000uF	20% 35V
C1353	1-136-165-00	FILM 0.1uF	5% 50V
C1354	1-136-165-00	FILM 0.1uF	5% 50V
C1360	1-161-494-00	CERAMIC 0.022uF	25V
			(#2, D259)
C1361	1-124-122-11	ELECT 100uF	20% 50V

< FILTER >

CF301	1-577-070-81	FILTER, CERAMIC (EXCEPT ★:A)
CF301	1-567-389-11	FILTER, CERAMIC (★:A)
CF303	1-577-070-81	FILTER, CERAMIC (EXCEPT ★:A)
CF303	1-567-389-11	FILTER, CERAMIC (★:A)
CF304	1-577-075-11	OSCILLATOR, CERAMIC

< CONNECTOR >

* CN212	1-564-506-11	PLUG, CONNECTOR 3P
CN302	1-695-089-11	PIN, CONNECTOR (PC BOARD) 11P
* CN501	1-568-830-11	SOCKET, CONNECTOR 11P
* CN1001	1-580-912-21	JACK, PIN 4P (IN) (#2, D259)
* CN1001	1-580-912-11	JACK, PIN 4P (IN) (#1, D209)
* CN1006	1-568-955-11	PIN, CONNECTOR 6P (A27)
CN1201	1-537-494-11	TERMINAL BOARD (SPEAKER) (EXCEPT #4, 8)
CN1201	1-537-481-11	TERMINAL BOARD (SPEAKER) (#4, 8)
* CN1203	1-564-508-11	PLUG, CONNECTOR 5P
CN1205	1-506-468-11	PIN, CONNECTOR 3P
CN1206	1-568-802-11	SOCKET, CONNECTOR 19P
* CN1241	1-565-291-11	SOCKET, CONNECTOR 13P (SYSTEM CONTROL)
CN1243	1-695-094-11	SOCKET, CONNECTOR 11P
CN1244	1-506-469-11	PIN, CONNECTOR 4P (A27, #9, 10, 11)
* CN1301	1-566-210-11	PIN, CONNECTOR 3P (POWER SOURCE) (★:C)

CN1302	1-506-469-11	PIN, CONNECTOR 4P
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< DIODE >

D351	8-719-987-63	DIODE 1N4148M (★:B)
D1202	8-719-987-63	DIODE 1N4148M
D1203	8-719-987-63	DIODE 1N4148M
D1204	8-719-987-63	DIODE 1N4148M
D1205	8-719-933-48	DIODE HZS7B3L
D1302	8-719-312-09	DIODE RBA-402
D1303	8-719-200-82	DIODE 11ES2

<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Remarks</u>
D1304	8-719-200-82	DIODE	11ES2
D1305	8-719-200-82	DIODE	11ES2
D1306	8-719-200-82	DIODE	11ES2
D1316	8-719-200-82	DIODE	11ES2
D1317	8-719-200-82	DIODE	11ES2
D1318	8-719-200-82	DIODE	11ES2
D1319	8-719-200-82	DIODE	11ES2
D1321	8-719-987-63	DIODE	1N4148M
D1323	8-719-987-63	DIODE	1N4148M
D1324	8-719-987-63	DIODE	1N4148M
D1341	8-719-001-76	DIODE	UZL-12M3
D1347	8-719-987-63	DIODE	1N4148M
D1368	8-719-200-82	DIODE	11ES2
D1369	8-719-200-82	DIODE	11ES2

< FRONTEND >

FE301	1-465-006-11	FRONT END (FM) (2 GANG) (#2, 3)
FE301	1-693-090-21	FRONT END (FM) (2 GANG) (#1, 7, 9, 10, 11)
FE301	1-463-857-21	FRONT END (★:A)
FE301	1-465-396-11	FRONT END (FM 3GANG) (#5)
FE351	1-236-463-11	ENCAPSULATED COMPONENT (★:B)
FE352	1-239-260-11	ENCAPSULATED COMPONENT (EXCEPT ★:B)
FE352	1-239-261-12	ENCAPSULATED COMPONENT (★:B)

< IC >

IC301	8-759-821-45	IC LA1851N
IC501	8-759-820-91	IC LC7218
IC1001	8-759-634-51	IC M5218AP
IC1002	8-759-000-48	IC MC14052BCP
IC1003	8-759-634-51	IC M5218AP
IC1202	8-759-111-68	IC uPC1237HA
IC1302	8-759-231-53	IC M5F7805
IC1303	8-759-071-48	IC M5F7807L
IC1304	8-759-604-95	IC M5F79M07
IC1305	8-759-820-13	IC L78MR06
IC1306	8-759-231-58	IC M5F7812L (★:C)

< JACK >

* J1202	1-569-130-11	JACK, PIN 2P (SURROUND SPEAKER) (EXCEPT #11)
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< IFT >

IFT301	1-404-713-11	TRANSFORMER, IF
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< COIL >

L301	1-410-686-11	INDUCTOR 1mH (A27, #11)
L301	1-407-500-00	INDUCTOR 4.7mH (D209, #8, 9, 10)
L351	1-410-525-11	INDUCTOR 220uH (★:B)
L1301	1-408-117-00	INDUCTOR 10uH (#6)
L1302	1-408-117-00	INDUCTOR 10uH (#6)

MAIN	SURROUND
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Ref. No.	Part No.	Description	Remarks
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< FILTER >

LPF301	1-235-164-00	FILTER, LOW PASS	
LPF302	1-235-164-00	FILTER, LOW PASS	

< TRANSISTOR >

Q301	8-729-230-99	TRANSISTOR	2SC2669-OY (★:A)
Q302	8-729-230-99	TRANSISTOR	2SC2669-OY (★:A)
Q303	8-729-230-99	TRANSISTOR	2SC2669-OY (EXCEPT #1)
Q304	8-729-230-99	TRANSISTOR	2SC2669-OY
Q305	8-729-900-80	TRANSISTOR	DTC114ES
Q306	8-729-900-61	TRANSISTOR	DTA114ES
Q307	8-729-900-80	TRANSISTOR	DTC114ES
Q308	8-729-620-05	TRANSISTOR	2SC2603-EF (*2, D259)
Q308	8-729-119-78	TRANSISTOR	2SC2785-HFE (*1, D209)
Q309	8-729-620-05	TRANSISTOR	2SC2603-EF (*2, D259)
Q309	8-729-119-78	TRANSISTOR	2SC2785-HFE (*1, D209)
Q351	8-729-900-80	TRANSISTOR	DTC114ES (★:B)
Q352	8-729-119-78	TRANSISTOR	2SC2785-HFE (*3, 5, 7)
Q352	8-729-620-05	TRANSISTOR	2SC2603-EF (*9, 10)
Q353	8-729-119-76	TRANSISTOR	2SA1175-HFE (★:B)
Q354	8-729-900-80	TRANSISTOR	DTC114ES (★:B)
Q355	8-729-900-80	TRANSISTOR	DTC114ES (★:B)
Q356	8-729-900-80	TRANSISTOR	DTC114ES (★:B)
Q501	8-729-900-80	TRANSISTOR	DTC114ES
Q502	8-729-900-61	TRANSISTOR	DTA114ES
Q521	8-729-202-67	TRANSISTOR	2SK246-GR3
Q522	8-729-201-84	TRANSISTOR	2SC3112-B (A27, *11)
Q522	8-729-141-26	TRANSISTOR	2SC3622A-LK (D209, *8, 9, 10)
Q531	8-729-202-67	TRANSISTOR	2SK246-GR3 (★:B)
Q532	8-729-141-26	TRANSISTOR	2SC3622A-LK (★:B)
Q1004	8-729-900-36	TRANSISTOR	DTC124ES (*1)
Q1005	8-729-119-76	TRANSISTOR	2SA1175-HFE (*1)
Q1204	8-729-900-63	TRANSISTOR	DTA124ES
Q1302	8-729-209-15	TRANSISTOR	2SD2012
Q1304	8-729-620-05	TRANSISTOR	2SC2603-EF (*2, D259)
Q1304	8-729-119-78	TRANSISTOR	2SC2785-HFE (*1, D209)
Q1305	8-729-620-05	TRANSISTOR	2SC2603-EF (*2, D259)
Q1305	8-729-119-78	TRANSISTOR	2SC2785-HFE (*1, D209)

< RESISTOR >

R301	1-249-401-11	CARBON	47 5% 1/4W F
R302	1-249-409-11	CARBON	220 5% 1/4W F (*1)
R302	1-249-413-11	CARBON	470 5% 1/4W F (*2, 3, 5)
R302	1-249-407-11	CARBON	150 5% 1/4W F
			(*7, 9, 10, 11)
R302	1-249-405-11	CARBON	100 5% 1/4W F (★:A)
R303	1-249-411-11	CARBON	330 5% 1/4W (★:A)
R304	1-249-432-11	CARBON	18K 5% 1/4W (★:A)
R305	1-249-411-11	CARBON	330 5% 1/4W (★:A)
R306	1-249-434-11	CARBON	27K 5% 1/4W (★:A)

Ref. No.	Part No.	Description	Remarks
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R307	1-249-414-11	CARBON	560 5% 1/4W F (★:A)
R308	1-249-411-11	CARBON	330 5% 1/4W
R309	1-249-432-11	CARBON	18K 5% 1/4W (EXCEPT #1)
R310	1-249-411-11	CARBON	330 5% 1/4W
R311	1-249-434-11	CARBON	27K 5% 1/4W (EXCEPT #1)
R311	1-247-891-00	CARBON	330K 5% 1/4W (*1)
R312	1-249-414-11	CARBON	560 5% 1/4W F
			(*2, 3, 5, 7, 9, 11)
R312	1-249-416-11	CARBON	820 5% 1/4W F (★:A)
R313	1-249-405-11	CARBON	100 5% 1/4W F
R314	1-249-437-11	CARBON	47K 5% 1/4W (★:A)
R315	1-249-404-00	CARBON	82 5% 1/4W
R315	1-249-435-11	CARBON	33K 5% 1/4W (★:A)
R316	1-249-429-11	CARBON	10K 5% 1/4W
R317	1-249-417-11	CARBON	1K 5% 1/4W F
R318	1-249-435-11	CARBON	33K 5% 1/4W
R319	1-249-428-11	CARBON	8.2K 5% 1/4W F
R320	1-249-432-11	CARBON	18K 5% 1/4W
R321	1-249-423-11	CARBON	3.3K 5% 1/4W F
R322	1-249-429-11	CARBON	10K 5% 1/4W
R323	1-249-418-11	CARBON	1.2K 5% 1/4W F
			(EXCEPT ★:A)
R323	1-249-423-11	CARBON	3.3K 5% 1/4W F (*4, 6)
R323	1-249-417-11	CARBON	1K 5% 1/4W F (*8)
R324	1-249-429-11	CARBON	10K 5% 1/4W
R325	1-249-429-11	CARBON	10K 5% 1/4W
R326	1-249-409-11	CARBON	220 5% 1/4W F
R327	1-249-437-11	CARBON	47K 5% 1/4W
R328	1-249-437-11	CARBON	47K 5% 1/4W
R331	1-247-899-11	CARBON	680K 5% 1/4W
R332	1-247-899-11	CARBON	680K 5% 1/4W
R333	1-249-421-11	CARBON	2.2K 5% 1/4W F
R334	1-249-421-11	CARBON	2.2K 5% 1/4W F
R335	1-249-420-11	CARBON	1.8K 5% 1/4W F
R336	1-249-420-11	CARBON	1.8K 5% 1/4W F
R337	1-249-426-11	CARBON	5.6K 5% 1/4W
R338	1-249-426-11	CARBON	5.6K 5% 1/4W
R351	1-249-433-11	CARBON	22K 5% 1/4W (★:B)
R352	1-249-437-11	CARBON	47K 5% 1/4W (★:B)
R353	1-247-903-00	CARBON	1M 5% 1/4W (★:B)
R354	1-249-441-11	CARBON	100K 5% 1/4W (★:B)
R355	1-249-433-11	CARBON	22K 5% 1/4W (★:B)
R356	1-249-421-11	CARBON	2.2K 5% 1/4W F (★:B)
R361	1-249-437-11	CARBON	47K 5% 1/4W
R362	1-249-437-11	CARBON	47K 5% 1/4W
R363	1-249-425-11	CARBON	4.7K 5% 1/4W F (★:B)
R364	1-249-425-11	CARBON	4.7K 5% 1/4W F (★:B)
R365	1-249-429-11	CARBON	10K 5% 1/4W
			(D209, *8, 9, 10)
R366	1-249-413-11	CARBON	470 5% 1/4W F (★:B)
R367	1-249-434-11	CARBON	27K 5% 1/4W (★:B)
R368	1-249-433-11	CARBON	22K 5% 1/4W (★:B)
R370	1-249-423-11	CARBON	3.3K 5% 1/4W F (★:A)

MAIN

SURROUND

Ref. No.	Part No.	Description	Remarks			
R501	1-249-417-11	CARBON	1K	5%	1/4W	F
R502	1-249-417-11	CARBON	1K	5%	1/4W	F
R503	1-249-417-11	CARBON	1K	5%	1/4W	F
R504	1-249-417-11	CARBON	1K	5%	1/4W	F
R505	1-249-429-11	CARBON	10K	5%	1/4W	
R506	1-249-417-11	CARBON	1K	5%	1/4W	F
R510	1-249-401-11	CARBON	47	5%	1/4W	F
R511	1-249-429-11	CARBON	10K	5%	1/4W	
R512	1-249-425-11	CARBON	4.7K	5%	1/4W	F
R513	1-249-417-11	CARBON	1K	5%	1/4W	F
R514	1-249-429-11	CARBON	10K	5%	1/4W	
R515	1-249-417-11	CARBON	1K	5%	1/4W	F
R521	1-249-423-11	CARBON	3.3K	5%	1/4W	F
R522	1-249-425-11	CARBON	4.7K	5%	1/4W	F
R523	1-249-414-11	CARBON	560	5%	1/4W	F
R524	1-249-417-11	CARBON	1K	5%	1/4W	F
R525	1-249-410-11	CARBON	270	5%	1/4W	F
R526	1-249-421-11	CARBON	2.2K	5%	1/4W	F
R527	1-249-425-11	CARBON	4.7K	5%	1/4W	F
R528	1-249-425-11	CARBON	4.7K	5%	1/4W	F
R529	1-249-405-11	CARBON	100	5%	1/4W	F
R530	1-249-405-11	CARBON	100	5%	1/4W	F
R531	1-249-423-11	CARBON	3.3K	5%	1/4W	F (★:B)
R532	1-249-433-11	CARBON	22K	5%	1/4W	(★:B)
R533	1-249-414-11	CARBON	560	5%	1/4W	F (★:B)
R534	1-249-417-11	CARBON	1K	5%	1/4W	F (★:B)
R535	1-249-410-11	CARBON	270	5%	1/4W	F (★:B)
R536	1-249-421-11	CARBON	2.2K	5%	1/4W	F (★:B)
R537	1-249-425-11	CARBON	4.7K	5%	1/4W	F (★:B)
R538	1-249-405-11	CARBON	100	5%	1/4W	F (★:B)
R613	1-249-441-11	CARBON	100K	5%	1/4W	(#9, 10, 11)
R631	1-249-441-11	CARBON	100K	5%	1/4W	(A27, D209, #8)
R1001	1-249-417-11	CARBON	1K	5%	1/4W	F
R1002	1-249-441-11	CARBON	100K	5%	1/4W	
R1003	1-249-416-11	CARBON	820	5%	1/4W	F
R1004	1-247-897-11	CARBON	560K	5%	1/4W	
R1005	1-249-437-11	CARBON	47K	5%	1/4W	
R1006	1-249-409-11	CARBON	220	5%	1/4W	F
R1007	1-249-441-11	CARBON	100K	5%	1/4W	
R1008	1-249-409-11	CARBON	220	5%	1/4W	F
R1010	1-249-417-11	CARBON	1K	5%	1/4W	F
R1012	1-249-417-11	CARBON	1K	5%	1/4W	F
R1013	1-249-441-11	CARBON	100K	5%	1/4W	
R1014	1-249-437-11	CARBON	47K	5%	1/4W	
R1015	1-249-437-11	CARBON	47K	5%	1/4W	
R1021	1-249-437-11	CARBON	47K	5%	1/4W	
R1022	1-249-432-11	CARBON	18K	5%	1/4W	(A27)

Ref. No.	Part No.	Description	Remarks			
R1023	1-249-437-11	CARBON	47K	5%	1/4W	
R1024	1-249-417-11	CARBON	1K	5%	1/4W	F
R1029	1-249-433-11	CARBON	22K	5%	1/4W	(#1)
R1030	1-249-433-11	CARBON	22K	5%	1/4W	(#1)
R1031	1-249-433-11	CARBON	22K	5%	1/4W	(#1)
R1035	1-249-415-11	CARBON	680	5%	1/4W	F
R1037	1-249-421-11	CARBON	2.2K	5%	1/4W	F
R1051	1-249-417-11	CARBON	1K	5%	1/4W	F
R1052	1-249-441-11	CARBON	100K	5%	1/4W	
R1053	1-249-416-11	CARBON	820	5%	1/4W	F
R1054	1-247-897-11	CARBON	560K	5%	1/4W	
R1055	1-249-437-11	CARBON	47K	5%	1/4W	
R1056	1-249-409-11	CARBON	220	5%	1/4W	F
R1057	1-249-441-11	CARBON	100K	5%	1/4W	
R1058	1-249-409-11	CARBON	220	5%	1/4W	F
R1060	1-249-417-11	CARBON	1K	5%	1/4W	F
R1062	1-249-417-11	CARBON	1K	5%	1/4W	F
R1063	1-249-441-11	CARBON	100K	5%	1/4W	
R1065	1-249-415-11	CARBON	680	5%	1/4W	F
R1071	1-249-437-11	CARBON	47K	5%	1/4W	
R1072	1-249-432-11	CARBON	18K	5%	1/4W	(A27)
R1073	1-249-437-11	CARBON	47K	5%	1/4W	
R1074	1-249-417-11	CARBON	1K	5%	1/4W	F
R1095	1-249-433-11	CARBON	22K	5%	1/4W	(A27, #11)
R1222	1-249-415-11	CARBON	680	5%	1/4W	F
R1223	1-249-415-11	CARBON	680	5%	1/4W	F
R1226	1-215-890-11	METAL OXIDE	470	5%	2W	F
R1233	1-249-433-11	CARBON	22K	5%	1/4W	
R1234	1-249-433-11	CARBON	22K	5%	1/4W	
R1235	1-249-437-11	CARBON	47K	5%	1/4W	
R1236	1-249-441-11	CARBON	100K	5%	1/4W	
R1237	1-249-429-11	CARBON	10K	5%	1/4W	
R1240	1-249-438-11	CARBON	56K	5%	1/4W	
R1241	1-249-385-11	CARBON	2.2	5%	1/6W	F (★:A)
R1242	1-249-385-11	CARBON	2.2	5%	1/6W	F (★:A)
R1243	1-249-385-11	CARBON	2.2	5%	1/6W	F (★:A)
R1244	1-249-385-11	CARBON	2.2	5%	1/6W	F (★:A)
R1272	1-249-415-11	CARBON	680	5%	1/4W	F
R1273	1-249-415-11	CARBON	680	5%	1/4W	F
R1290	1-249-437-11	CARBON	47K	5%	1/4W	
R1301	1-249-429-11	CARBON	10K	5%	1/4W	
R1302	1-249-429-11	CARBON	10K	5%	1/4W	
R1306	1-249-433-11	CARBON	22K	5%	1/4W	
R1309	1-249-433-11	CARBON	22K	5%	1/4W	
R1321	1-249-417-11	CARBON	1K	5%	1/4W	F
R1322	1-249-429-11	CARBON	10K	5%	1/4W	
R1345	1-249-421-11	CARBON	2.2K	5%	1/4W	F
R1346	1-249-425-11	CARBON	4.7K	5%	1/4W	F (★:C)
R1347	1-249-417-11	CARBON	1K	5%	1/4W	F

PANEL	H. P	POWER SUPPLY (B)	MIC	STAND-BY	VR
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Ref. No.	Part No.	Description	Remarks
C1155	1-124-464-11	ELECT 0.22uF 20% 50V	
C1156	1-136-161-00	FILM 0.047uF 5% 50V	
C1157	1-136-155-00	FILM 0.015uF 5% 50V	
C1158	1-136-155-00	FILM 0.015uF 5% 50V	
C1159	1-137-437-11	FILM 0.0056uF 5% 50V	
C1160	1-161-327-00	CERAMIC 0.0033uF 20% 16V	
C1161	1-136-155-00	FILM 0.015uF 5% 50V	
C1162	1-136-157-00	FILM 0.022uF 5% 50V	
C1163	1-136-153-00	FILM 0.01uF 5% 50V	
C1164	1-161-377-00	CERAMIC 0.0047uF 20% 16V	
C1165	1-124-257-00	ELECT 2.2uF 20% 50V	
C1173	1-162-286-31	CERAMIC 220PF 10% 50V	
C1181	1-162-215-31	CERAMIC 47PF 5% 50V	
C1182	1-162-215-31	CERAMIC 47PF 5% 50V	
C1198	1-161-379-00	CERAMIC 0.01uF 20% 25V	
C1237	1-162-282-31	CERAMIC 100PF 10% 50V (★:A)	
C1238	1-162-282-31	CERAMIC 100PF 10% 50V (★:A)	
C1401	1-162-294-31	CERAMIC 0.001uF 10% 50V (A27)	
C1402	1-124-916-11	ELECT 22uF 20% 63V (A27)	
C1403	1-124-916-11	ELECT 22uF 20% 63V (A27)	
C1406	1-124-443-00	ELECT 100uF 20% 10V (*2)	
C1408	1-126-163-11	ELECT 4.7uF 20% 50V (A27)	
C1409	1-161-379-00	CERAMIC 0.01uF 20% 25V (A27)	
C1410	1-126-163-11	ELECT 4.7uF 20% 50V (A27, D259)	
C1411	1-124-443-00	ELECT 100uF 20% 10V (*1)	
C1601	1-124-925-11	ELECT 2.2uF 20% 100V (A27)	
C1602	1-124-463-00	ELECT 0.1uF 20% 50V (A27)	
C1603	1-124-925-11	ELECT 2.2uF 20% 100V (A27)	
C1604	1-162-294-31	CERAMIC 0.001uF 10% 50V (A27)	
C1605	1-162-215-31	CERAMIC 47PF 5% 50V (A27)	
C1606	1-162-282-31	CERAMIC 100PF 10% 50V (A27)	
C1607	1-162-215-31	CERAMIC 47PF 5% 50V (A27)	
C1608	1-124-589-11	ELECT 47uF 20% 16V (A27)	
C1609	1-124-589-11	ELECT 47uF 20% 16V (A27)	
C1610	1-162-282-31	CERAMIC 100PF 10% 50V (A27)	

< CONNECTOR >

- * CN601 1-568-830-11 SOCKET, CONNECTOR 11P
CN1101 1-568-802-11 SOCKET, CONNECTOR 19P

< DIODE >

D601	8-719-987-63	DIODE 1N4148M
D602	8-719-010-26	DIODE UZ-3.9BSB
D603	8-719-987-63	DIODE 1N4148M
D604	8-719-987-63	DIODE 1N4148M
D605	8-719-987-63	DIODE 1N4148M
D606	8-719-933-48	DIODE HZS7B3L
D611	8-719-987-63	DIODE 1N4148M
D612	8-719-987-63	DIODE 1N4148M
D613	8-719-987-63	DIODE 1N4148M

Ref. No.	Part No.	Description	Remarks
D614	8-719-987-63	DIODE 1N4148M	
D615	8-719-987-63	DIODE 1N4148M	
D616	8-719-987-63	DIODE 1N4148M	
D622	8-719-987-63	DIODE 1N4148M (*1, 4, 8, 11)	
D623	8-719-987-63	DIODE 1N4148M (A27, *11)	
D624	8-719-987-63	DIODE 1N4148M (*5)	
D625	8-719-987-63	DIODE 1N4148M	
D626	8-719-987-63	DIODE 1N4148M	
D629	8-719-987-63	DIODE 1N4148M	
D641	8-719-200-82	DIODE 11ES2	
D1130	8-719-301-37	LED SEL2210S-CD	
D1131	8-719-301-37	LED SEL2210S-CD	
D1132	8-719-301-37	LED SEL2210S-CD	
D1133	8-719-301-37	LED SEL2210S-CD	
D1134	8-719-301-37	LED SEL2210S-CD	
D1141	8-719-301-37	LED SEL2210S-CD	
D1145	8-719-313-69	DIODE SEL3210S-CD	
D1151	8-719-987-63	DIODE 1N4148M	
D1152	8-719-987-63	DIODE 1N4148M	
D1153	8-719-987-63	DIODE 1N4148M	
D1154	8-719-987-63	DIODE 1N4148M	

< FILTER >

- FL601 1-519-732-11 INDICATOR TUBE, FLUORESCENT
FL1401 1-519-648-21 INDICATOR TUBE, FLUORESCENT (A27)

< IC >

- IC601 8-759-096-99 IC uPD75212ACW-A47
IC602 8-749-922-36 IC GP1U50XB
IC1101 8-759-634-51 IC M5218AP
IC1102 8-759-634-51 IC M5218AP
IC1103 8-759-820-62 IC LB1639
IC1104 8-759-916-12 IC TC74HC00P
IC1401 8-759-065-87 IC XR-1096 (A27)
IC1601 8-759-634-51 IC M5218AP (A27)

< JACK >

- J601 1-691-002-11 JACK, LARGE TYPE (HEADPHONES) (*2)
J601 1-573-151-11 JACK, LARGE TYPE (HEADPHONES) (*1)
* J1201 1-691-003-11 JACK, LARGE TYPE (MIC)

< COIL >

- L601 1-410-521-11 INDUCTOR 100uH

< TRANSISTOR >

- Q601 8-729-620-05 TRANSISTOR 2SC2603-EF (*2, D259)
Q601 8-729-119-78 TRANSISTOR 2SC2785-HFE (*1, D209)
Q602 8-729-900-80 TRANSISTOR DTC114ES
Q603 8-729-900-80 TRANSISTOR DTC114ES
Q1101 8-729-620-05 TRANSISTOR 2SC2603-EF (*2, D259)

MAIN	SURROUND	PANEL	H. P	POWER SUPPLY (B)	MIC	STAND-BY	VR
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Ref. No.	Part No.	Description	Remarks
< VARIABLE RESISTOR >			
RV301	1-238-601-11	RES, ADJ, CARBON 22K	
RV302	1-238-601-11	RES, ADJ, CARBON 22K	
< RELAY >			
RY1201	1-515-533-11	RELAY	
RY1201	1-515-920-11	RELAY (24V) (D209, *8)	
< TRANSFORMER >			
T301	1-404-807-11	TRANSFORMER, DISCRIMINATOR	
T302	1-235-126-00	ENCAPSULATED COMPONENT (★:A)	
< TERMINAL >			
TM301	1-537-264-11	TERMINAL BOARD (ANTENNA) (A27, *3, 10, 11)	
* TM301	1-537-288-11	TERMINAL BOARD, ANTENNA (PAL) (ANTENNA) (*4, 5, 6, 7, 8, 9)	
< TEST PIN >			
* TP1	1-560-060-00	PIN, CONNECTOR 2P	
< VIBRATOR >			
XT501	1-577-126-21	VIBRATOR, CRYSTAL	
XT501	1-579-383-11	VIBRATOR, CRYSTAL	

*	A-4356-640-A	PANEL BOARD, COMPLETE (*1)	

*	A-4356-736-A	PANEL BOARD, COMPLETE (*2)	

*	A-4356-623-A	PANEL BOARD, COMPLETE (*3)	

*	A-4356-930-A	PANEL BOARD, COMPLETE (*4)	

*	A-4360-822-A	PANEL BOARD, COMPLETE (*5)	

*	A-4356-924-A	PANEL BOARD, COMPLETE (*6)	

*	A-4356-608-A	PANEL BOARD, COMPLETE (*7)	

*	A-4360-541-A	PANEL BOARD, COMPLETE (*8)	

*	A-4360-531-A	PANEL BOARD, COMPLETE (*9)	

*	A-4360-520-A	PANEL BOARD, COMPLETE (*10)	

*	A-4360-509-A	PANEL BOARD, COMPLETE (*11)	

*	1-646-477-11	H.P BOARD	

Ref. No.	Part No.	Description	Remarks
*	1-646-478-11	POWER SUPPLY (B) BOARD	*****
*	1-646-479-11	MIC BOARD (A27)	*****
*	1-646-480-11	STAND-BY SW BOARD	*****
*	1-646-497-11	VR BOARD	*****
*	1-533-213-11	HOLDER, FUSE (*2, D259)	
*	1-533-213-31	HOLDER, FUSE (*2, D259)	
*	1-533-217-31	HOLDER, FUSE (D209)	
*	1-533-293-11	FUSE HOLDER (*2, D259)	
*	4-942-301-01	HOLDER, FL TUBE	
*	4-949-935-31	CUSHION (FL) (*2, D259)	
< CAPACITOR >			
C603	1-136-169-00	FILM 0.22uF	5% 50V
C604	1-164-159-11	CERAMIC 0.1uF	50V
C605	1-125-486-11	DOUBLE LAYERS 0.22F	5.5V
C606	1-164-159-11	CERAMIC 0.1uF	50V
C607	1-124-907-11	ELECT 10uF	20% 50V
C608	1-161-379-00	CERAMIC 0.01uF	20% 25V
C609	1-161-379-00	CERAMIC 0.01uF	20% 25V
C610	1-162-286-31	CERAMIC 220PF	10% 50V
C650	1-124-907-11	ELECT 10uF	20% 50V
C1101	1-124-257-00	ELECT 2.2uF	20% 50V
C1102	1-124-589-11	ELECT 47uF	20% 16V
C1103	1-162-282-31	CERAMIC 100PF	10% 50V
C1104	1-124-257-00	ELECT 2.2uF	20% 50V
C1105	1-124-464-11	ELECT 0.22uF	20% 50V
C1106	1-136-161-00	FILM 0.047uF	5% 50V
C1107	1-136-155-00	FILM 0.015uF	5% 50V
C1108	1-136-155-00	FILM 0.015uF	5% 50V
C1109	1-137-437-11	FILM 0.0056uF	5% 50V
C1110	1-161-327-00	CERAMIC 0.0033uF	20% 16V
C1111	1-136-155-00	FILM 0.015uF	5% 50V
C1112	1-136-157-00	FILM 0.022uF	5% 50V
C1113	1-136-153-00	FILM 0.01uF	5% 50V
C1114	1-161-377-00	CERAMIC 0.0047uF	20% 16V
C1115	1-124-257-00	ELECT 2.2uF	20% 50V
C1120	1-161-379-00	CERAMIC 0.01uF	20% 25V
C1121	1-161-379-00	CERAMIC 0.01uF	20% 25V
C1123	1-162-286-31	CERAMIC 220PF	10% 50V
C1131	1-162-215-31	CERAMIC 47PF	5% 50V
C1132	1-162-215-31	CERAMIC 47PF	5% 50V
C1151	1-124-257-00	ELECT 2.2uF	20% 50V
C1152	1-124-589-11	ELECT 47uF	20% 16V
C1153	1-162-282-31	CERAMIC 100PF	10% 50V
C1154	1-124-257-00	ELECT 2.2uF	20% 50V

PANEL	H. P	POWER SUPPLY (B)	MIC	STAND-BY	VR	POWER AMPLIFIER
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Ref. No.	Part No.	Description	Remarks
R1411	1-239-054-11	COMPOSITION CIRCUIT BLOCK	(A27)
R1412	1-239-054-11	COMPOSITION CIRCUIT BLOCK	(A27)
R1601	1-249-429-11	CARBON 10K 5% 1/4W	(A27)
R1602	1-249-417-11	CARBON 1K 5% 1/4W F	(A27)
R1603	1-249-412-11	CARBON 390 5% 1/4W F	(A27)

R1604	1-249-434-11	CARBON 27K 5% 1/4W	(A27)
R1605	1-249-433-11	CARBON 22K 5% 1/4W	(A27)
R1606	1-249-437-11	CARBON 47K 5% 1/4W	(A27)

< VARIABLE RESISTOR >

RV1101	1-223-251-11	RES, VAR, CARBON 100K/100K (SURROUND)	
RV1102	1-223-251-11	RES, VAR, CARBON 100K/100K (DBFB)	
RV1103	1-223-289-11	RES, VAR, SLIDE 100K (100Hz)	
RV1104	1-223-289-11	RES, VAR, SLIDE 100K (330Hz)	
RV1105	1-223-289-11	RES, VAR, SLIDE 100K (1KHz)	

RV1106	1-223-289-11	RES, VAR, SLIDE 100K (3.3KHz)	
RV1107	1-223-289-11	RES, VAR, SLIDE 100K (10KHz)	
RV1108	1-223-253-11	RES, VAR, CARBON 100K/100K (BALANCE)	
RV1109	1-223-291-11	RES, VAR, CARBON 100K/100K (VOLUME)	
RV1153	1-223-289-11	RES, VAR, SLIDE 100K (100Hz)	

RV1154	1-223-289-11	RES, VAR, SLIDE 100K (330Hz)	
RV1155	1-223-289-11	RES, VAR, SLIDE 100K (1KHz)	
RV1156	1-223-289-11	RES, VAR, SLIDE 100K (3.3KHz)	
RV1157	1-223-289-11	RES, VAR, SLIDE 100K (10KHz)	

< SWITCH >

S601	1-554-303-21	SWITCH, TACTILE (1)	
S602	1-554-303-21	SWITCH, TACTILE (2)	
S603	1-554-303-21	SWITCH, TACTILE (3)	
S604	1-554-303-21	SWITCH, TACTILE (4)	
S605	1-554-303-21	SWITCH, TACTILE (5)	
S606	1-554-303-21	SWITCH, TACTILE (6)	
S607	1-554-303-21	SWITCH, TACTILE (7)	
S608	1-554-303-21	SWITCH, TACTILE (8)	
S609	1-554-303-21	SWITCH, TACTILE (9)	
S610	1-554-303-21	SWITCH, TACTILE (0)	
S611	1-554-303-21	SWITCH, TACTILE (+)	
S612	1-554-303-21	SWITCH, TACTILE (-)	
S613	1-554-303-21	SWITCH, TACTILE (SHIFT)	
S614	1-554-303-21	SWITCH, TACTILE (BAND SELECT)	
S615	1-554-303-21	SWITCH, TACTILE (ST/MUTE)	

S616	1-554-303-21	SWITCH, TACTILE (MEMORY)	
S618	1-554-303-21	SWITCH, TACTILE (SYSTEM POWER)	
S619	1-554-303-21	SWITCH, TACTILE (VIDEO) (A27, *4, D259)	
S620	1-554-303-21	SWITCH, TACTILE (TAPE)	
S621	1-554-303-21	SWITCH, TACTILE (CD)	

S622	1-554-303-21	SWITCH, TACTILE (TUNER)	
S623	1-554-303-21	SWITCH, TACTILE (PHONO)	
S1102	1-571-305-11	SWITCH, PUSH (EQUALIZER) (1 KEY)	

Ref. No.	Part No.	Description	Remarks
		< VIBRATOR >	
X601	1-567-775-11	VIBRATOR, CERAMIC	

*	A-4356-649-A	POWER AMPLIFIER BOARD, COMPLETE (*1)	

*	A-4356-749-A	POWER AMPLIFIER BOARD, COMPLETE (*2)	

*	A-4356-628-A	POWER AMPLIFIER BOARD, COMPLETE (*3)	

*	A-4356-935-A	POWER AMPLIFIER BOARD, COMPLETE (*4, 6)	

*	A-4356-616-A	POWER AMPLIFIER BOARD, COMPLETE (*5, 7)	

*	A-4360-546-A	POWER AMPLIFIER BOARD, COMPLETE (*8)	

*	A-4360-537-A	POWER AMPLIFIER BOARD, COMPLETE (*9)	

*	A-4360-527-A	POWER AMPLIFIER BOARD, COMPLETE (*10)	

*	A-4360-516-A	POWER AMPLIFIER BOARD, COMPLETE (*11)	

< CAPACITOR >

C1201	1-124-257-00	ELECT 2.2uF 20% 50V	
C1202	1-162-286-31	CERAMIC 220PF 10% 50V	
		(EXCEPT ★:A)	
C1202	1-162-290-31	CERAMIC 470PF 10% 50V (★:A)	
C1203	1-162-286-31	CERAMIC 220PF 10% 50V	
		(EXCEPT ★:A)	
C1203	1-162-292-31	CERAMIC 680PF 10% 50V (★:A)	
C1204	1-124-477-11	ELECT 47uF 20% 25V	
C1205	1-124-910-11	ELECT 47uF 20% 50V	
C1206	1-124-122-11	ELECT 100uF 20% 50V	
C1207	1-136-165-00	FILM 0.1uF 5% 50V	
C1208	1-124-916-11	ELECT 22uF 20% 63V	
C1209	1-164-159-11	CERAMIC 0.1uF 50V	
C1210	1-136-163-00	FILM 0.068uF 5% 50V	
C1211	1-136-163-00	FILM 0.068uF 5% 50V	
C1220	1-124-910-11	ELECT 47uF 20% 50V	
C1230	1-161-494-00	CERAMIC 0.022uF 25V (★:A)	
C1231	1-161-494-00	CERAMIC 0.022uF 25V (★:A)	
C1232	1-161-494-00	CERAMIC 0.022uF 25V (★:A)	
C1233	1-161-494-00	CERAMIC 0.022uF 25V (★:A)	
C1251	1-124-257-00	ELECT 2.2uF 20% 50V	
C1252	1-162-286-31	CERAMIC 220PF 10% 50V	
		(EXCEPT ★:A)	
C1252	1-162-290-31	CERAMIC 470PF 10% 50V (★:A)	

PANEL	H. P	POWER SUPPLY (B)	MIC	STAND-BY	VR
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Ref. No.	Part No.	Description	Remarks	Ref. No.	Part No.	Description	Remarks
Q1101	8-729-119-78	TRANSISTOR 2SC2785-HFE (*1, D209)		R1114	1-249-429-11	CARBON 10K 5% 1/4W	
Q1102	8-729-141-26	TRANSISTOR 2SC3622A-LK		R1115	1-249-429-11	CARBON 10K 5% 1/4W	
Q1121	8-729-900-36	TRANSISTOR DTC124ES		R1116	1-247-852-11	CARBON 7.5K 5% 1/4W	
Q1122	8-729-119-76	TRANSISTOR 2SA1175-HFE		R1117	1-247-852-11	CARBON 7.5K 5% 1/4W	
Q1136	8-729-900-36	TRANSISTOR DTC124ES		R1118	1-249-425-11	CARBON 4.7K 5% 1/4W F	
Q1138	8-729-900-36	TRANSISTOR DTC124ES		R1119	1-249-425-11	CARBON 4.7K 5% 1/4W F	
Q1141	8-729-900-63	TRANSISTOR DTA124ES		R1120	1-249-423-11	CARBON 3.3K 5% 1/4W F	
Q1142	8-729-900-63	TRANSISTOR DTA124ES		R1121	1-249-423-11	CARBON 3.3K 5% 1/4W F	
Q1143	8-729-900-80	TRANSISTOR DTC114ES		R1122	1-247-887-00	CARBON 220K 5% 1/4W	
Q1144	8-729-900-80	TRANSISTOR DTC114ES		R1123	1-249-421-11	CARBON 2.2K 5% 1/4W F	
Q1145	8-729-900-61	TRANSISTOR DTA114ES		R1124	1-249-425-11	CARBON 4.7K 5% 1/4W F	
Q1151	8-729-620-05	TRANSISTOR 2SC2603-EF (*2, D259)		R1125	1-249-433-11	CARBON 22K 5% 1/4W	
Q1151	8-729-119-78	TRANSISTOR 2SC2785-HFE (*1, D209)		R1126	1-249-423-11	CARBON 3.3K 5% 1/4W F (A27)	
Q1152	8-729-141-26	TRANSISTOR 2SC3622A-LK		R1127	1-249-436-11	CARBON 39K 5% 1/4W (A27)	
< RESISTOR >				R1130	1-249-412-11	CARBON 390 5% 1/4W F	
R601	1-249-429-11	CARBON 10K 5% 1/4W		R1132	1-249-412-11	CARBON 390 5% 1/4W F	
R602	1-249-429-11	CARBON 10K 5% 1/4W		R1133	1-249-412-11	CARBON 390 5% 1/4W F	
R603	1-249-423-11	CARBON 3.3K 5% 1/4W F		R1135	1-249-433-11	CARBON 22K 5% 1/4W	
R604	1-249-437-11	CARBON 47K 5% 1/4W (*4, 8)		R1142	1-249-412-11	CARBON 390 5% 1/4W F	
R605	1-249-433-11	CARBON 22K 5% 1/4W		R1143	1-249-433-11	CARBON 22K 5% 1/4W	
R606	1-249-433-11	CARBON 22K 5% 1/4W		R1145	1-249-412-11	CARBON 390 5% 1/4W F	
R607	1-249-439-11	CARBON 68K 5% 1/4W		R1149	1-249-429-11	CARBON 10K 5% 1/4W	
R608	1-249-417-11	CARBON 1K 5% 1/4W F		R1151	1-249-441-11	CARBON 100K 5% 1/4W	
R609	1-249-405-11	CARBON 100 5% 1/4W F		R1152	1-249-417-11	CARBON 1K 5% 1/4W F	
R610	1-249-429-11	CARBON 10K 5% 1/4W		R1154	1-249-441-11	CARBON 100K 5% 1/4W	
R611	1-249-437-11	CARBON 47K 5% 1/4W		R1155	1-249-433-11	CARBON 22K 5% 1/4W	
R612	1-249-417-11	CARBON 1K 5% 1/4W F		R1156	1-249-424-11	CARBON 3.9K 5% 1/4W F	
R613	1-249-425-11	CARBON 4.7K 5% 1/4W F		R1157	1-249-441-11	CARBON 100K 5% 1/4W	
R614	1-249-393-11	CARBON 10 5% 1/4W F		R1158	1-249-427-11	CARBON 6.8K 5% 1/4W F	
R621	1-249-433-11	CARBON 22K 5% 1/4W		R1159	1-249-412-11	CARBON 390 5% 1/4W F	
R622	1-249-433-11	CARBON 22K 5% 1/4W		R1160	1-249-431-11	CARBON 15K 5% 1/4W	
R623	1-249-433-11	CARBON 22K 5% 1/4W		R1161	1-249-439-11	CARBON 68K 5% 1/4W	
R624	1-249-433-11	CARBON 22K 5% 1/4W		R1162	1-249-433-11	CARBON 22K 5% 1/4W	
R625	1-249-417-11	CARBON 1K 5% 1/4W F (*1, D259)		R1163	1-249-431-11	CARBON 15K 5% 1/4W	
R642	1-249-409-11	CARBON 220 5% 1/4W F		R1164	1-249-429-11	CARBON 10K 5% 1/4W	
R643	1-249-417-11	CARBON 1K 5% 1/4W F (*2, D209, 8, 10, 11)		R1165	1-249-429-11	CARBON 10K 5% 1/4W	
R1065	1-249-409-11	CARBON 220 5% 1/4W F (*2)		R1166	1-247-852-11	CARBON 7.5K 5% 1/4W	
R1101	1-249-441-11	CARBON 100K 5% 1/4W		R1167	1-247-852-11	CARBON 7.5K 5% 1/4W	
R1102	1-249-417-11	CARBON 1K 5% 1/4W F		R1168	1-249-425-11	CARBON 4.7K 5% 1/4W F	
R1103	1-249-431-11	CARBON 15K 5% 1/4W		R1169	1-249-425-11	CARBON 4.7K 5% 1/4W F	
R1104	1-249-441-11	CARBON 100K 5% 1/4W		R1170	1-249-423-11	CARBON 3.3K 5% 1/4W F	
R1105	1-249-433-11	CARBON 22K 5% 1/4W		R1171	1-249-423-11	CARBON 3.3K 5% 1/4W F	
R1106	1-249-424-11	CARBON 3.9K 5% 1/4W F		R1172	1-247-887-00	CARBON 220K 5% 1/4W	
R1107	1-249-441-11	CARBON 100K 5% 1/4W		R1173	1-249-421-11	CARBON 2.2K 5% 1/4W F	
R1108	1-249-427-11	CARBON 6.8K 5% 1/4W F		R1174	1-249-425-11	CARBON 4.7K 5% 1/4W F	
R1109	1-249-412-11	CARBON 390 5% 1/4W F		R1176	1-249-423-11	CARBON 3.3K 5% 1/4W F (A27)	
R1110	1-249-431-11	CARBON 15K 5% 1/4W		R1177	1-249-436-11	CARBON 39K 5% 1/4W (A27)	
R1111	1-249-439-11	CARBON 68K 5% 1/4W		R1401	1-249-418-11	CARBON 1.2K 5% 1/4W F (A27)	
R1112	1-249-433-11	CARBON 22K 5% 1/4W		R1402	1-247-881-00	CARBON 120K 5% 1/4W (A27)	
R1113	1-249-431-11	CARBON 15K 5% 1/4W		R1403	1-247-881-00	CARBON 120K 5% 1/4W (A27)	
				R1405	1-249-409-11	CARBON 220 5% 1/4W F (*1)	

POWER AMPLIFIER

POWER SUPPLY

Ref. No.	Part No.	Description	Remarks
C1253	1-162-286-31	CERAMIC 220PF 10% 50V	(EXCEPT ★:A)
C1253	1-162-292-31	CERAMIC 680PF 10% 50V	(★:A)
C1254	1-124-477-11	ELECT 47uF 20% 25V	
C1255	1-124-910-11	ELECT 47uF 20% 50V	
C1256	1-124-122-11	ELECT 100uF 20% 50V	
C1257	1-136-165-00	FILM 0.1uF 5% 50V	
C1260	1-136-163-00	FILM 0.068uF 5% 50V	
C1261	1-136-163-00	FILM 0.068uF 5% 50V	
C1280	1-161-494-00	CERAMIC 0.022uF 25V	(★:A)

< CONNECTOR >

- * CN1201 1-564-518-11 PLUG, CONNECTOR 3P
 * CN1202 1-564-522-11 PLUG, CONNECTOR 7P

< DIODE >

D1201	8-719-987-63	DIODE 1N4148M
D1251	8-719-987-63	DIODE 1N4148M

< IC >

IC1201	8-749-900-24	IC STK-4162MK2 (A27, #11)
IC1201	8-749-900-96	IC STK-4142MK2 (D209, #8, 9, 10)

< COIL >

L1221	1-420-872-00	COIL, AIR CORE
L1251	1-420-872-00	COIL, AIR CORE

< TRANSISTOR >

Q1201	8-729-140-84	TRANSISTOR 2SC1841-PAFAEA
Q1202	8-729-900-80	TRANSISTOR DTC114ES
Q1203	8-729-620-05	TRANSISTOR 2SC2603-EF (*2, D259)
Q1203	8-729-119-78	TRANSISTOR 2SC2785-HFE (*1, D209)
Q1251	8-729-140-84	TRANSISTOR 2SC1841-PAFAEA

< RESISTOR >

R1201	1-249-417-11	CARBON 1K 5% 1/4W F
R1202	1-249-438-11	CARBON 56K 5% 1/4W
R1203	1-249-417-11	CARBON 1K 5% 1/4W F
R1204	1-249-438-11	CARBON 56K 5% 1/4W
R1205	1-249-425-11	CARBON 4.7K 5% 1/4W F
R1206	1-249-425-11	CARBON 4.7K 5% 1/4W F
R1207	1-249-425-11	CARBON 4.7K 5% 1/4W F
R1208	1-249-425-11	CARBON 4.7K 5% 1/4W F
△R1209	1-212-881-11	FUSIBLE 100 5% 1/4W F
△R1210	1-217-151-00	RES, METAL PLATE 0.22
R1211	1-249-417-11	CARBON 1K 5% 1/4W F
R1212	1-249-431-11	CARBON 15K 5% 1/4W
R1213	1-249-441-11	CARBON 100K 5% 1/4W
R1214	1-249-421-11	CARBON 2.2K 5% 1/4W F
R1215	1-249-421-11	CARBON 2.2K 5% 1/4W F

Ref. No.	Part No.	Description	Remarks
R1216	1-249-421-11	CARBON 2.2K 5% 1/4W F	
R1217	1-249-421-11	CARBON 2.2K 5% 1/4W F	
R1218	1-249-397-11	CARBON 22 5% 1/4W F	
R1219	1-249-397-11	CARBON 22 5% 1/4W F	
R1220	1-249-397-11	CARBON 22 5% 1/4W F	
R1221	1-249-397-11	CARBON 22 5% 1/4W F	
R1227	1-249-429-11	CARBON 10K 5% 1/4W	
R1228	1-247-881-00	CARBON 120K 5% 1/4W	
R1229	1-249-439-11	CARBON 68K 5% 1/4W	
R1230	1-249-439-11	CARBON 68K 5% 1/4W	
R1231	1-249-417-11	CARBON 1K 5% 1/4W F	
R1232	1-249-428-11	CARBON 8.2K 5% 1/4W F	
R1238	1-249-433-11	CARBON 22K 5% 1/4W	
R1239	1-249-426-11	CARBON 5.6K 5% 1/4W	
R1241	1-249-383-81	CARBON 1.5 5% 1/4W F (*3, 5, 7)	
R1251	1-249-417-11	CARBON 1K 5% 1/4W F	
R1252	1-249-438-11	CARBON 56K 5% 1/4W	
R1253	1-249-417-11	CARBON 1K 5% 1/4W F	
R1254	1-249-438-11	CARBON 56K 5% 1/4W	
R1255	1-249-425-11	CARBON 4.7K 5% 1/4W F	
R1256	1-249-425-11	CARBON 4.7K 5% 1/4W F	
R1257	1-249-425-11	CARBON 4.7K 5% 1/4W F	
R1258	1-249-425-11	CARBON 4.7K 5% 1/4W F	
△R1259	1-212-881-11	FUSIBLE 100 5% 1/4W F	
△R1260	1-217-151-00	RES, METAL PLATE 0.22	
R1261	1-249-417-11	CARBON 1K 5% 1/4W F	
R1262	1-249-431-11	CARBON 15K 5% 1/4W	
R1263	1-249-441-11	CARBON 100K 5% 1/4W	
R1268	1-249-397-11	CARBON 22 5% 1/4W F	
R1269	1-249-397-11	CARBON 22 5% 1/4W F	
R1270	1-249-397-11	CARBON 22 5% 1/4W F	
R1271	1-249-397-11	CARBON 22 5% 1/4W F	

- * 1-646-474-11 POWER SUPPLY BOARD

< CAPACITOR >

C1301	1-161-744-00	CERAMIC 0.01uF 400V
C1314	1-124-122-11	ELECT 100uF 20% 50V
C1315	1-124-927-11	ELECT 4.7uF 20% 100V
C1316	1-124-910-11	ELECT 47uF 20% 50V
C1318	1-124-636-00	ELECT 3300uF 20% 25V
C1348	1-164-159-11	CERAMIC 0.1uF 50V
		(*4, 5, 6, 7, D259)
C1362	1-124-916-11	ELECT 22uF 20% 63V

Note:
 The components identified by mark △ or dotted line with mark △ are critical for safety. Replace only with part number specified.

Note:
 Les composants identifiés par une marque △ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

POWER SUPPLY

Ref. No.	Part No.	Description	Remarks
		< CONNECTOR >	

* CN1301	1-564-321-00	PIN, CONNECTOR 2P	
CN1311	1-506-468-11	PIN, CONNECTOR 3P	
		< DIODE >	

D1307	8-719-002-60	DIODE	UZL-33L
D1309	8-719-014-66	DIODE	UZP-5.6B
D1311	8-719-200-82	DIODE	11ES2
D1370	8-719-200-82	DIODE	11ES2
D1321	8-719-987-63	DIODE	1N4148M

D1322	8-719-987-63	DIODE	1N4148M
D1354	8-719-200-82	DIODE	11ES2
D1355	8-719-200-82	DIODE	11ES2

< TRANSISTOR >

Q1301	8-729-141-83	TRANSISTOR	2SA473
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< RESISTOR >

R1303	1-249-421-11	CARBON	2.2K 5% 1/4W F
R1304	1-249-425-11	CARBON	4.7K 5% 1/4W F
R1391	1-202-725-00	SOLID	3.3M 10% 1/2W (*11)

< RELAY >

RY1301	1-515-720-11	RELAY	
RY1301	1-515-738-11	RELAY, POWER	

< TRANSFORMER >

△T1302	1-449-723-31	TRANSFORMER, POWER (EXCEPT *11)	
△T1302	1-450-786-11	TRANSFORMER, POWER (*11)	

< VOLTAGE SELECTION >

△VS1301	1-572-266-11	SWITCH, VOLTAGE SELECTION (A27)	
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MISCELLANEOUS

18	1-590-578-11	WIRE, FLAT TYPE (19 CORE)	
19	1-590-576-11	WIRE, FLAT TYPE (11 CORE)	
19	1-590-576-21	WIRE, FLAT TYPE (11 CORE) (D209)	
△64	1-575-651-11	CORD, POWER (*4, 5, 6, 7, 8, 9)	
△64	1-575-653-11	CORD, POWER (A27:E)	

△64	1-690-608-11	CORD, POWER (A27:AU2)	
△64	1-690-609-21	CORD, POWER (*11)	
△64	1-696-570-21	CORD, POWER (*3, 10)	
△64	1-696-848-21	CORD, POWER (*1)	
△F1301	1-532-350-00	FUSE 4A (A27, D209, *9, 10)	

△F1301	1-576-108-11	FUSE 4A (*8, 11)	
△F1302	1-532-350-00	FUSE 4A (A27, D209, *9, 10)	
△F1302	1-576-108-11	FUSE 4A (*8, 11)	

Ref. No.	Part No.	Description	Remarks
△F1303	1-532-203-00	FUSE 2A (D209, *9, 10)	
△F1303	1-532-286-00	FUSE 2.5A (A27, D209, *9, 10)	
△F1303	1-576-104-11	FUSE 2A (*8)	
△F1304	1-532-203-00	FUSE 2A (D209, *9, 10)	
△F1304	1-532-286-00	FUSE 2.5A (A27, D209, *9, 10)	
△F1304	1-576-104-11	FUSE 2A (*8)	
△F1305	1-532-286-00	FUSE 2.5A (A27, D209, *9, 10)	
△F1305	1-576-105-11	FUSE 2.5A (*8, 11)	
△F1306	1-532-286-00	FUSE 2.5A (A27, D209, *9, 10)	
△F1306	1-576-105-11	FUSE 2.5A (*8, 11)	
△T1301	1-423-431-11	TRANSFORMER, POWER (*11)	
△T1301	1-423-437-11	TRANSFORMER, POWER (D209)	
△T1301	1-423-437-21	TRANSFORMER, POWER (*8, 9, 10)	
△T1301	1-423-438-11	TRANSFORMER, POWER (*1)	
△T1301	1-423-438-21	TRANSFORMER, POWER (*2)	

ACCESSORIES & PACKING MATERIALS

1-465-963-11	COMMANDER, STANDARD (RM-S271)
1-501-374-11	ANTENNA, LOOP (*4, 5, 7, 8, D259:AE2)
1-501-536-11	ANTENNA (*4, 5, 7, 8, D259:AE2)
1-696-860-11	CORD, CONNECTION 13P (*4, 5, 7, 8, D259:AE2)
3-703-713-41	STICKER, SONY SYMBOL (10)

*

3-707-584-01	COVER, BATTERY
3-756-331-41	MANUAL, INSTRUCTION (ENGLISH/FRENCH/ SPANISH/PORTUGUESE) (D209:AE2)
3-756-331-51	MANUAL, INSTRUCTION (GERMANY/DUTCH/ SWEDISH/ITALIAN) (D209:AE2, *4)
3-756-331-61	MANUAL, INSTRUCTION (DANISH/FINNISH) (*5)
3-756-333-41	MANUAL, INSTRUCTION (ENGLISH/FRENCH/ SPANISH/PORTUGUESE) (D259:AE2)
3-756-333-51	MANUAL, INSTRUCTION (GERMANY/DUTCH/ SWEDISH/ITALIAN) (D259:AE2, *8)
4-956-903-01	INDIVIDUAL CARTON (D209:AE2, *4)
4-958-606-01	CUSHION (D209:AE2, *4)

*

HARDWARE LIST

#1	7-685-646-79	SCREW +BVTP 3X8 TYPE2 N-S
#2	7-685-871-01	SCREW +BVTT 3X6 (S)

Note:

The components identified by mark Δ or dotted line with mark Δ are critical for safety. Replace only with part number specified.

Note:

Les composants identifiés par une marque Δ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

PS-LX52/LX52P

SONY SERVICE MANUAL

US Model
Canadian Model
AEP Model
E Model
Australian Model
PS-LX52

UK Model
PS-LX52P

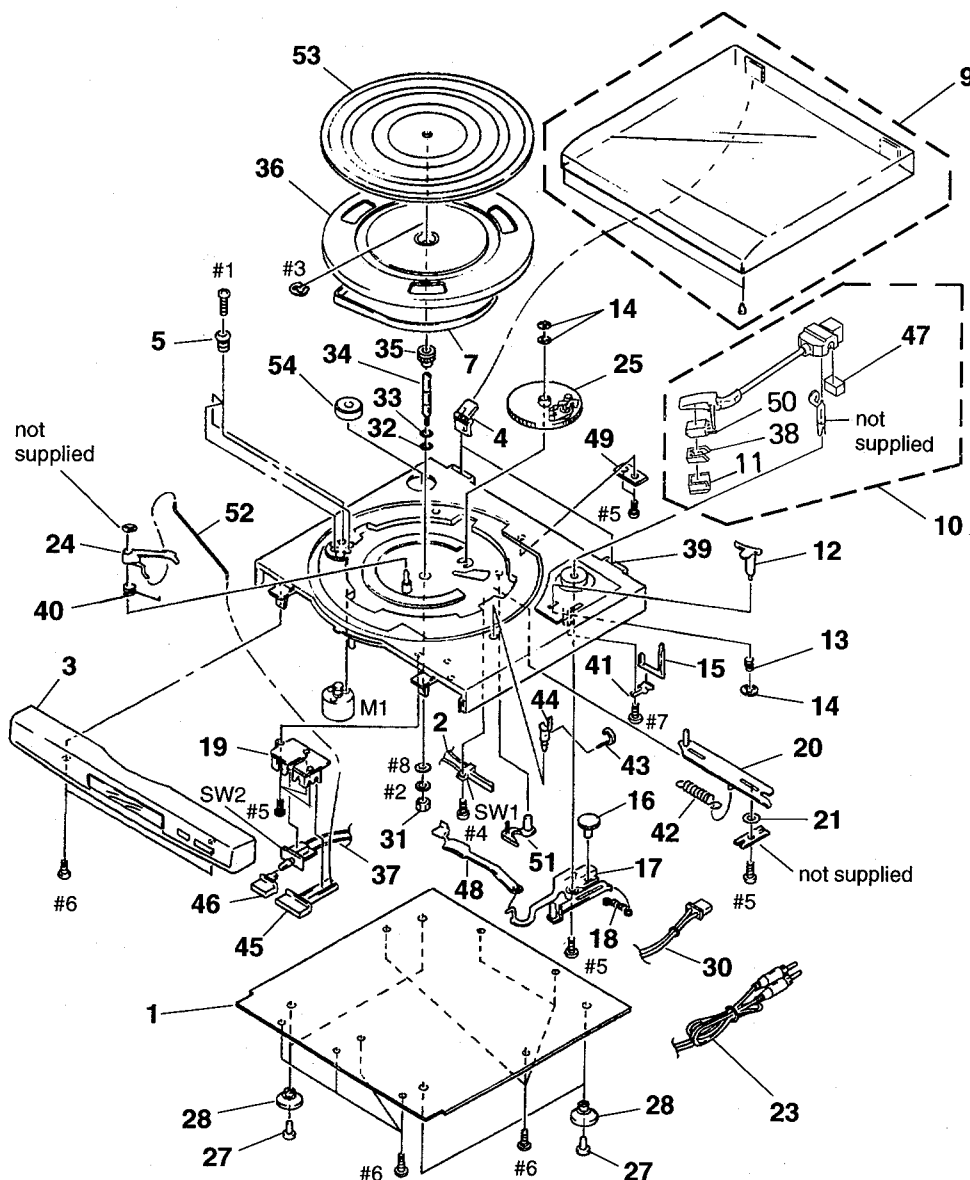
CORRECTION-1

Correct your service manual as shown below.

Subject: Correction of EXPLODED VIEW (PS-LX52P)

(SPM-95043)

EXPLODED VIEW [PS-LX52P]



Note:

- Item marked "*" are not stocked since they are seldom required for routine services. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
1	4-950-488-01	BOTTOM BOARD		36	4-947-494-01	TURNABLE PLATTER	
2	1-696-144-11	WIRE (45) (RED)		37	1-696-143-11	WIRE (30) (WHT)	
3	A-4660-303-A	FRONT PANEL ASSY		38	4-951-290-01	STYLUS (CN-234)	
4	4-947-476-01	HINGE		39	4-947-475-01	MAIN CABINET (G)	
5	4-947-505-01	CUSHION MOTOR		40	4-947-496-01	SPRING (34)	
7	4-947-503-01	BELT		41	4-947-477-01	CUEING (BASE)	
9	A-4604-946-A	DUST COVER ASSY		42	4-947-485-01	SPRING (22)	
10	A-4604-940-A	ARM ASSY, TONE		43	4-947-490-01	ARM CLIP	
11	4-948-095-01	COVER, CARTRIDGE		44	4-947-491-01	ARM REST	
12	4-947-466-01	TONE ARM ELEVATOR		45	4-956-997-01	KNOB REJECT	
13	4-947-467-01	SPRING (6)		46	4-956-996-01	KNOB SPEED	
14	4-947-514-01	4MM CS RING		47	4-947-464-01	COUNTER WEIGHT	
15	4-947-468-01	LEVER, CUEING		* 48	4-947-487-01	RETURN LINK	
16	4-947-470-01	ADJUST CAM		* 49	1-644-410-11	PC BOARD	
* 17	4-947-471-01	LINK, RETURN		50	1-251-028-11	CARTRIDGE (MAIN)	
18	4-947-472-01	SPRING (9-1)		51	4-957-000-01	PLASTIC RETURN	
19	4-956-998-01	BUTTON BASE		52	4-948-101-01	SPRING (38)	
20	A-4660-302-A	LEVER RETURN ASSY		53	A-4674-087-A	TURN TABLE MAT ASSY	
21	3-659-350-00	WASHER		54	3-701-806-00	ADAPTOR, 45	
23	1-555-116-11	CORD, PHONE		M1	A-4604-945-A	MOTOR ASSY	
24	4-947-495-01	WIPER REJECT		SW1	1-570-666-11	SWITCH (LEAF)	
25	A-4604-916-A	GEAR ASSY, SPUR		SW2	1-571-089-11	PUSH SWITCH (SPEED)	
27	4-950-497-01	FOOT SEAT		#1	7-621-773-87	SCREW (64)	
28	4-950-490-01	PLASTIC STAND		#2	7-623-210-22	WASHER (57)	
30	1-557-109-21	CORD, DC		#3	7-624-110-04	6MM E RING	
31	4-947-510-01	NUT		#4	7-685-105-01	SCREW (59)	
32	3-451-162-00	WASHER (56)		#5	7-685-647-79	SCREW (58)	
33	3-701-445-21	WASHER		#6	7-685-646-79	SCREW (60)	
34	4-947-498-01	STEEL BALL		#7	7-685-645-79	SCREW (68)	
35	4-947-497-01	GEAR		#8	7-688-005-01	WASHER (69)	

PS-LX52/LX52P

SERVICE MANUAL REVISED

US Model
Canadian Model
AEP Model
E Model
Australian Model
PS-LX52
UK Model
PS-LX52P



Photo : PS-LX52

• PS-LX52P is the STEREO TURNTABLE SYSTEM in LBT-D109CD/LBT-A17CD/LBT-D108CD/LBT-D159CD/LBT-D209CD/LBT-D259CD/LBT-D309CD/LBT-D359CD.

SPECIFICATIONS

Turntable

Platter	30cm (12 in.)
Motor	DC servo motor
Drive system	Belt drive
Speed	33 $\frac{1}{3}$ rpm/45 rpm switchable
Wow and flutter	0.2% (WRMS)
Signal-to-noise ratio	60 dB (DIN-B)
Automatic System	Return, reject

Tonearm

Type	Dynamically balanced
Pivot-to-stylus length	203 mm (8 in.)
Overall arm length	235 mm (9 $\frac{1}{4}$ in.)

Cartridge

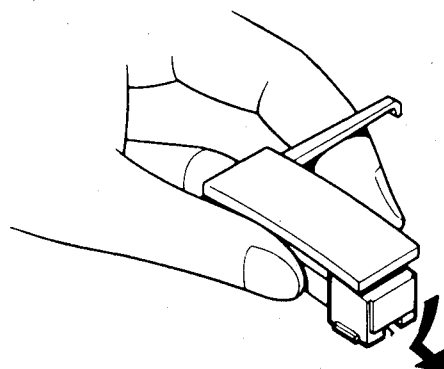
Type	Moving magnet type
Frequency response	20 Hz-20 kHz
Stylus	ND-155G

General

Dimensions	355 x 94 x 345 mm (w/h/d) (14 x 3 $\frac{3}{4}$ x 13 $\frac{5}{8}$ inches)
Weight	Approx. 2.5 kg (5 lb 8 oz)
Power requirement	US, Canadian model: 120V AC, 60 Hz AEP, Italian, East European, CIS model: 220-230V AC, 50/60 Hz UK model: 12V DC PX, E, Saudi Arabia, Singapore, Malaysia model: 110-120V/220-240V AC, adjustable with the voltage selector, 50/60 Hz Australian model: 240V AC, 50 Hz
Power consumption	4W (except UK model)
Accessory supplied	45-rpm adaptor (1)
Optional accessories	Replacement stylus ND-155G Stat spray XP-C10 Cleaner XP-C1, XP-C2

Design and specifications subject to change without notice.

REPLACING THE STYLUS



Replace the stylus after about 400 hours of use because using a worn stylus will damage records. An ND-155G replacement stylus is available at your Sony dealer. Be sure to turn the amplifier off before proceeding with replacement.

1. While holding the cartridge, detach the stylus assembly as illustrated.
2. Insert the new stylus into the cartridge.

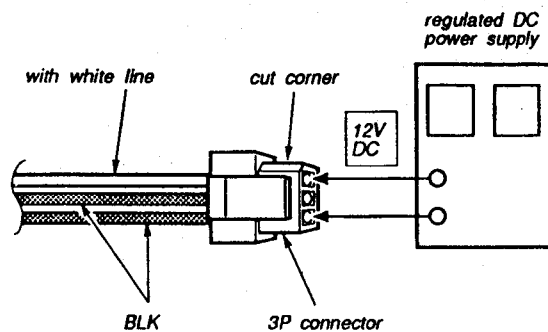


STEREO TURNTABLE SYSTEM
SONY®

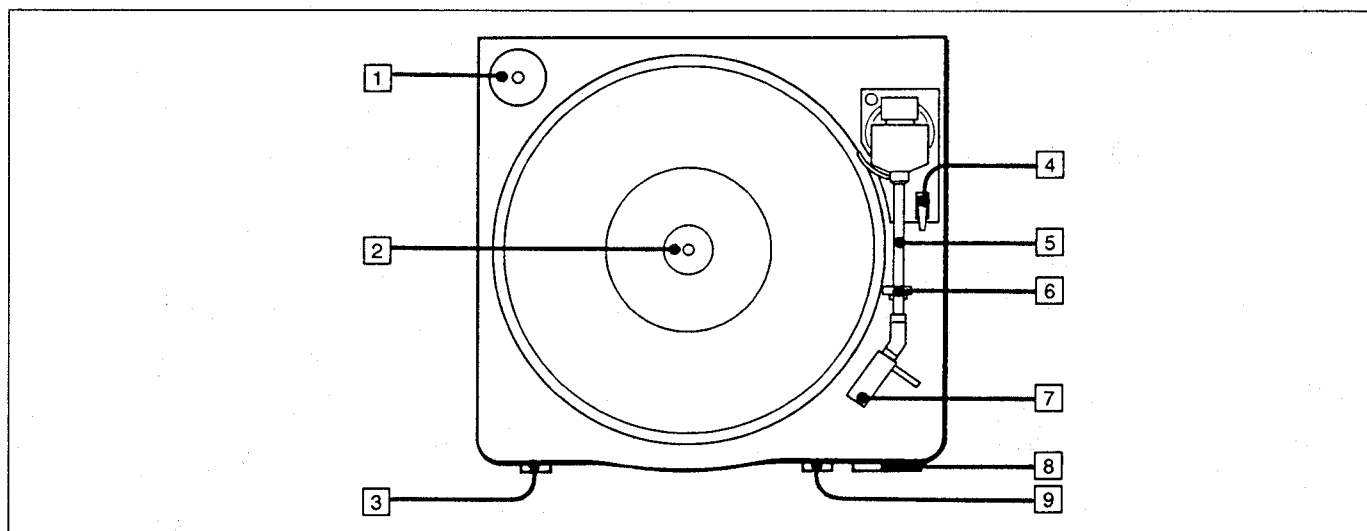
REPAIRING PRECAUTION (PS-LX52P only)

[To supply B+ voltage]

The power of this unit is fed from HST model. Because of this, connect the regulated power supply as illustrated right when this unit alone operates.

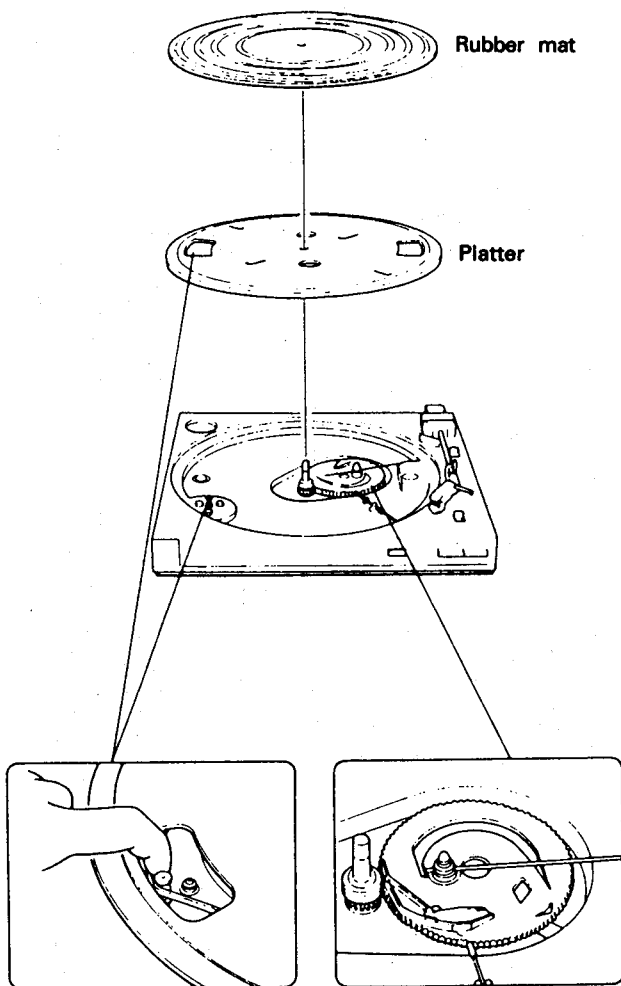


LOCATION OF CONTROLS



- 1 45-rpm adaptor
- 2 Center spindle
- 3 POWER switch (PS-LX52 only)
- 4 Cueing lever
- 5 Tonearm
- 6 Arm rest
- 7 Cartridge
- 8 REJECT button
- 9 Speed selector

TURNTABLE ASSEMBLY

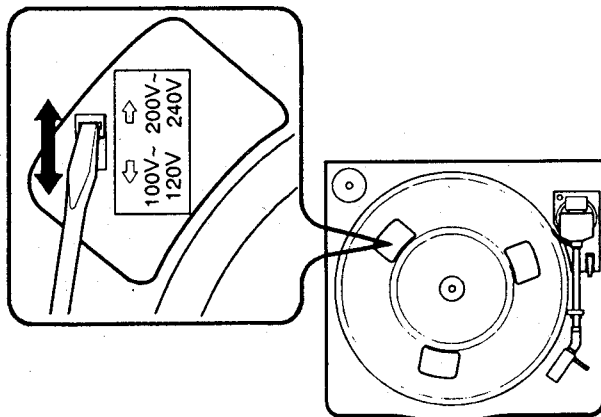
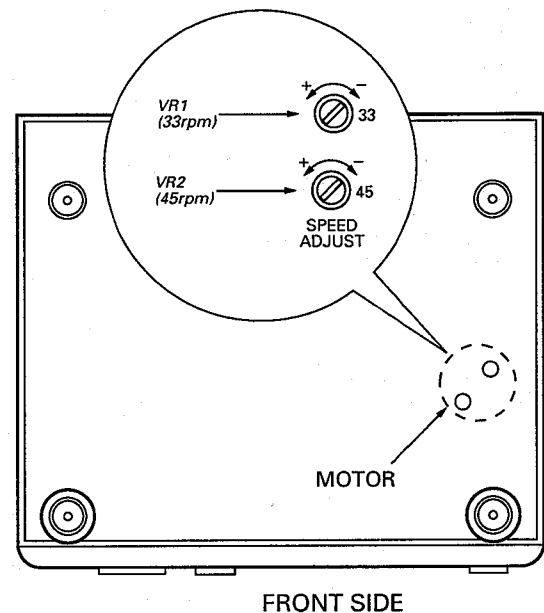


Hook the belt on the motor pulley.
If the belt is removed from the platter, replace it with the glossy side outward.

Speed Adjustment

Note: Be sure to perform 45rpm adjustment before 33rpm.

1. Place a stroboscope board on the turntable sheet.
Press the START button.
Adjust VR2 so that the striped pattern of stroboscope board is stationary.
2. Set the SPEED switch to 45.
Adjust VR1 in the same way.



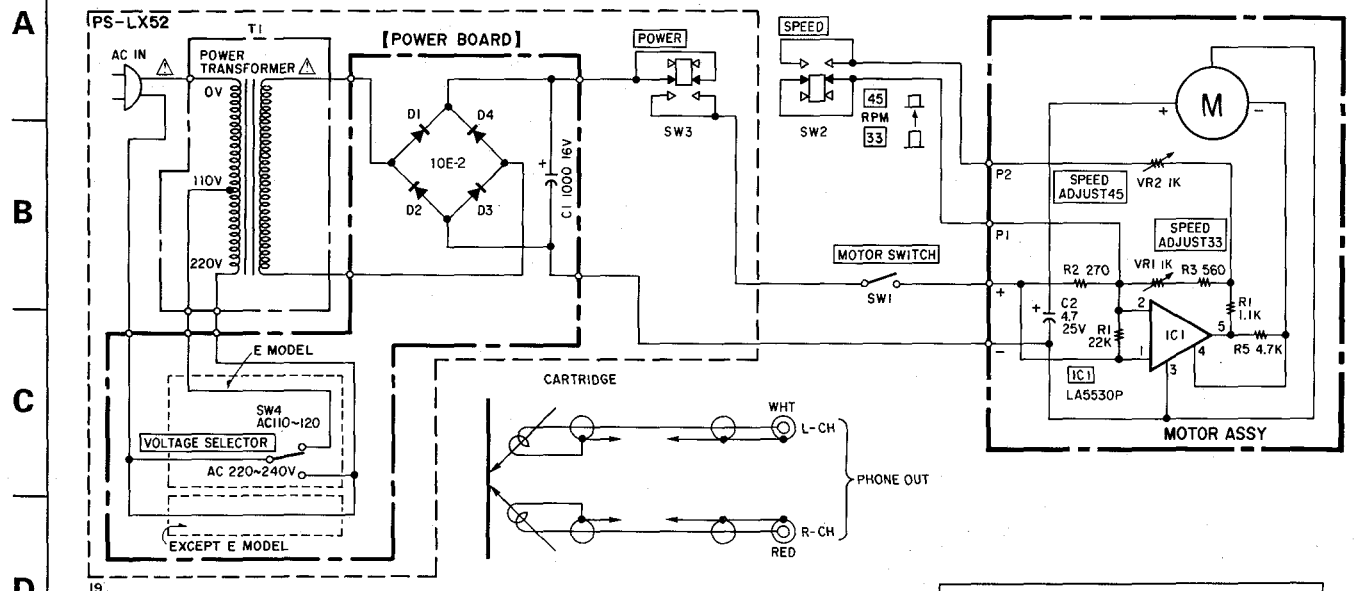
Setting the Voltage Selector

PS-LX52 (E, Saudi Arabia, PX, Singapore, Malaysia model)

For customers of the model equipped with the voltage selector

Check to confirm that the voltage selector is set to the local power line voltage. If not, set the voltage selector to the correct position before connecting the AC power cord to a wall outlet.

SCHEMATIC DIAGRAM




NOTE:

- All capacitors are in μF unless otherwise noted. $\text{pF}:\mu\text{F}$ 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and $1/4\text{W}$ or less unless otherwise specified.

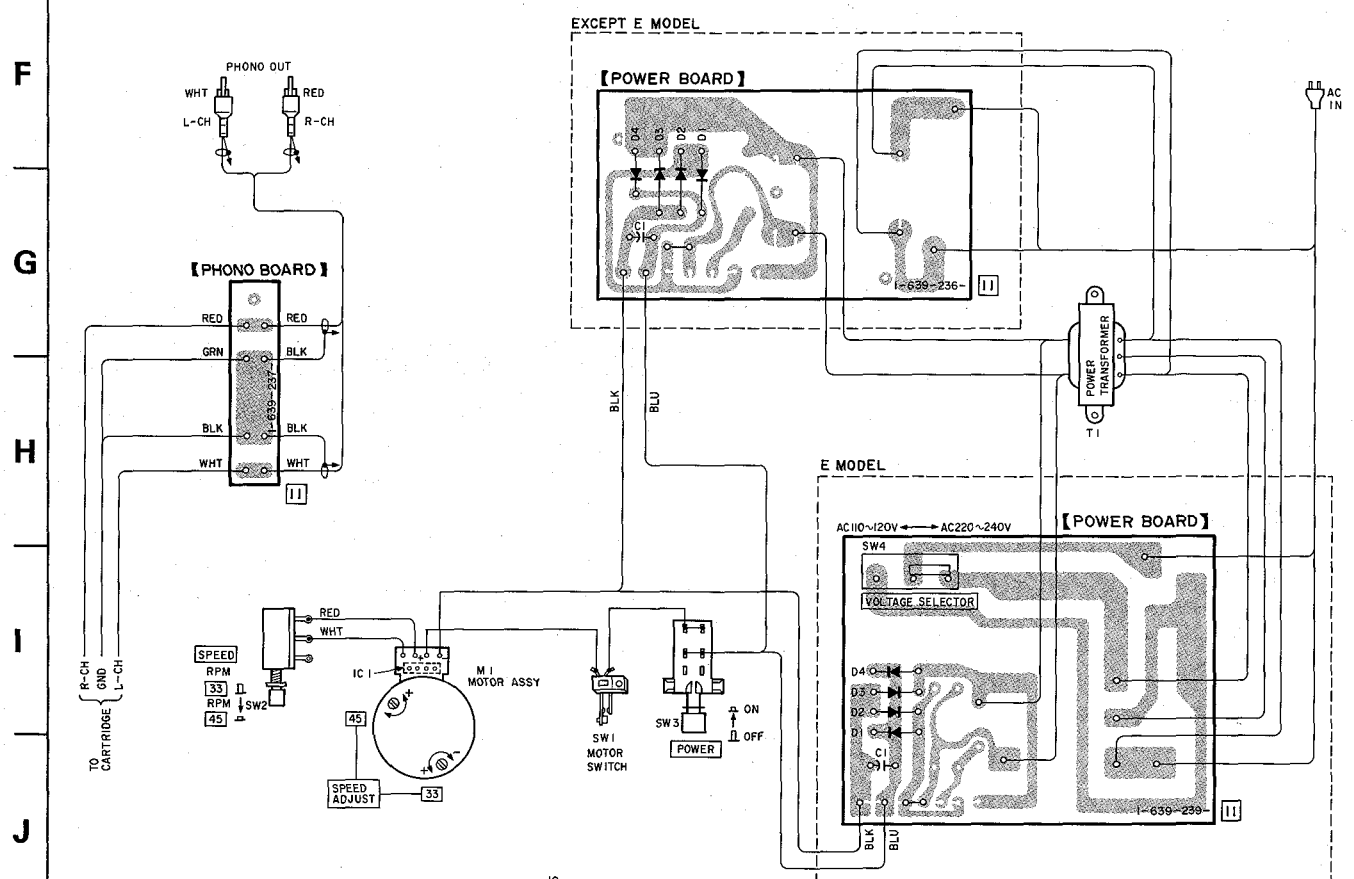
- **Switches :**

Ref.No.	Switch	Position
SW1	MOTOR	OFF
SW2	SPEED	33
SW3	POWER	OFF

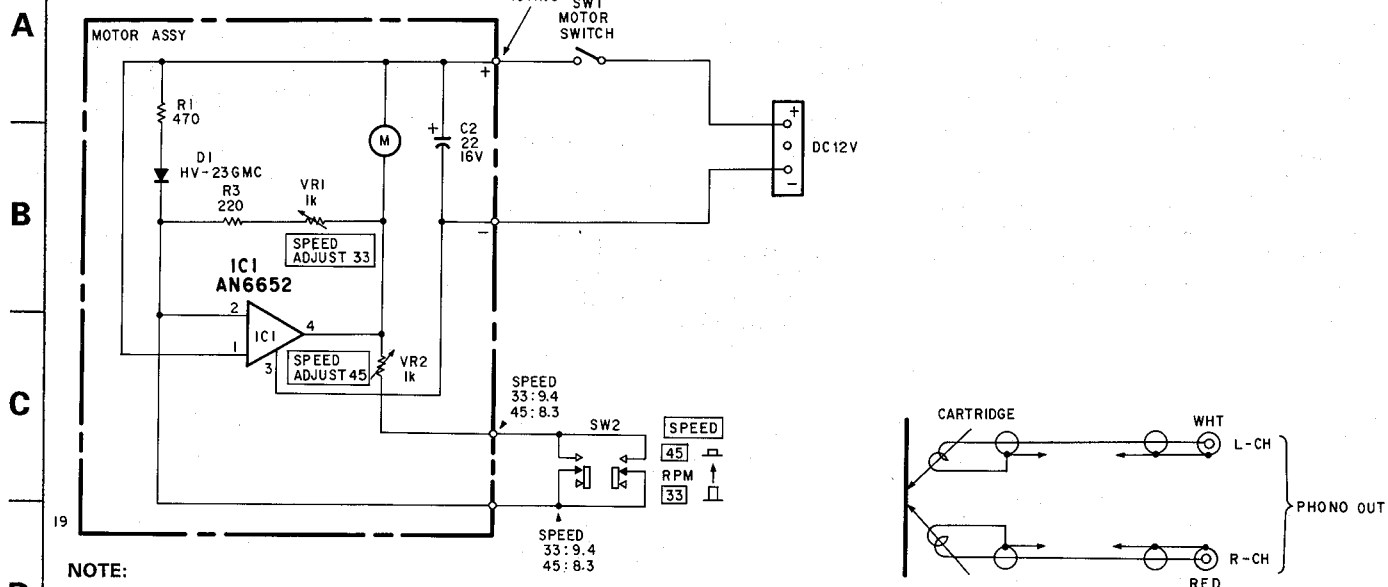
The components identified by mark \triangle or dotted line with mark \triangle are critical for safety.
Replace only with part number specified.

Les composants identifiés par une marque  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

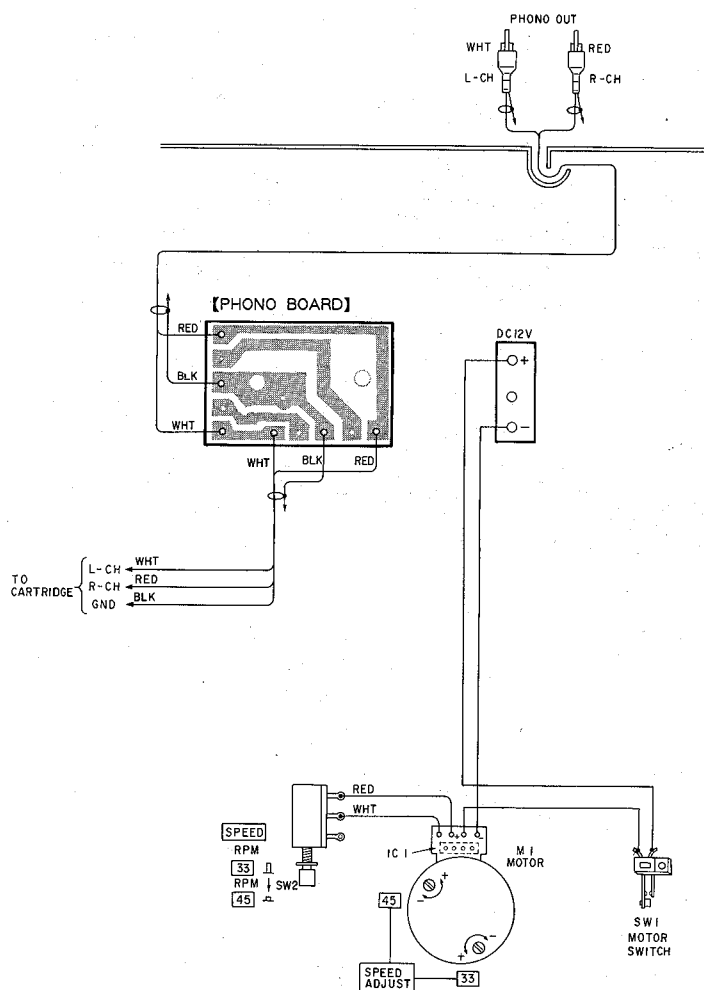
WIRING DIAGRAM



SCHEMATIC DIAGRAM



WIRING DIAGRAM



EXPLODED VIEW [PS-LX52]

NOTE:

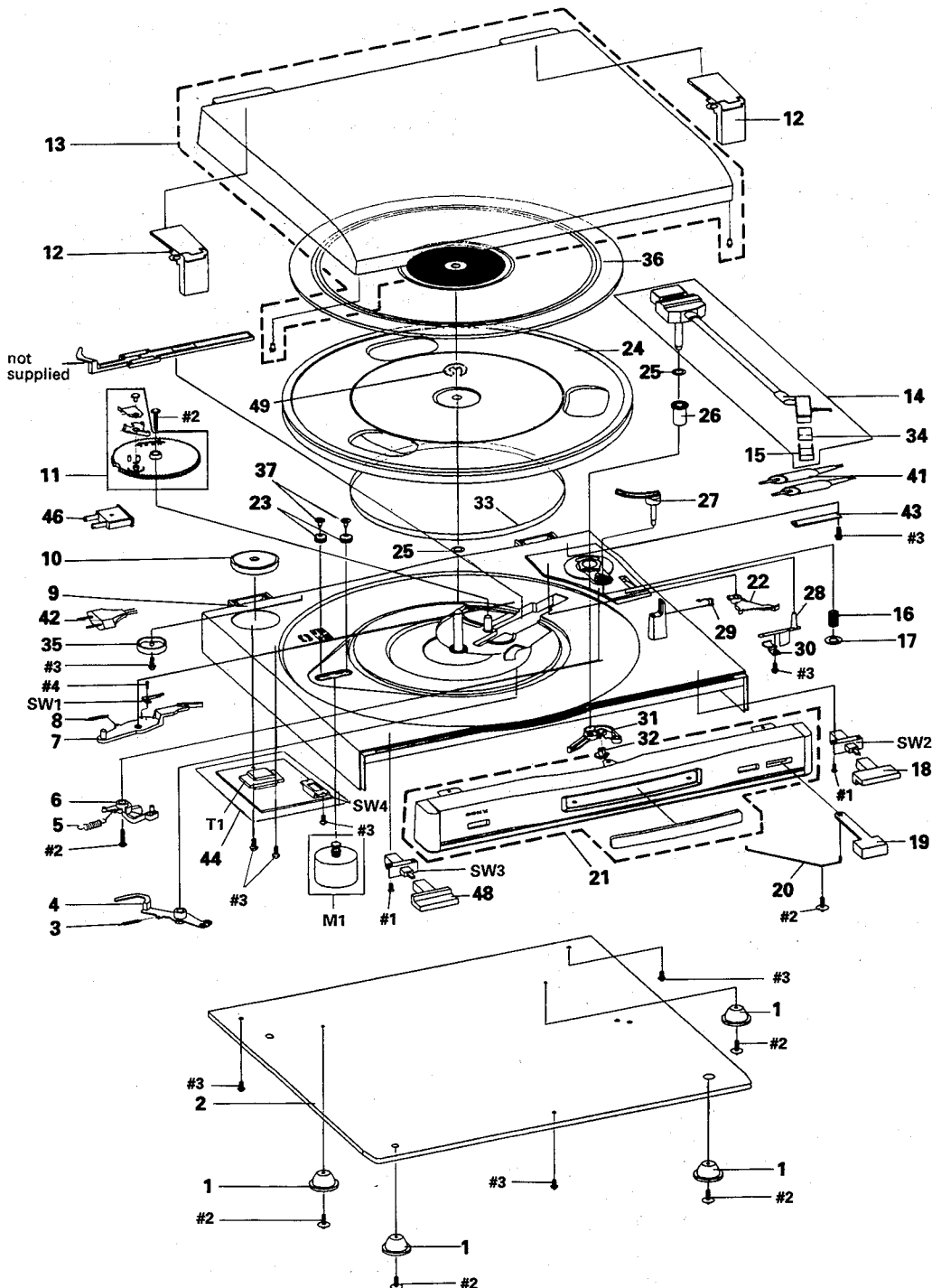
- -XX, -X mean standardized parts, so they may have some differences from the original one.
- The construction parts of an assembled part are indicated with a collation number in the remark column.
- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.

- Screw(# mark) list is given in the last of this parts list.

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- PX, Saudi Arabia, Singapore and Malaysia models are identical to E model.
- Italian, EE, and CIS models are identical to AEP model.
- AUS: Australian model
- EE: East European model




Ref. No.	Part No.	Description	Remarks	Ref. No.	Part No.	Description	Remarks
1	4-950-472-01	FOOT		28	4-950-440-01	LEVER-CUEING	
* 2	4-958-328-01	COVER-BOTTOM		29	4-950-439-01	LOCKER-ARM	
3	4-950-453-01	SPRING-REJECT		30	4-950-441-01	BRACKET-CUEING	
4	4-950-452-01	LEVER-REJECT		31	4-950-450-01	ARM-FEED	
5	4-950-455-01	SPRING-ELEVATOR		32	4-950-451-01	CAM-ADJUST	
6	4-950-454-01	ELEVATOR		33	4-950-434-01	BELT	
7	4-950-463-01	ARM-CONTROL		34	4-944-756-01	CARTRIDGE (AT-3600LAX)	
8	4-950-464-01	SPRING-CONTROL ARM		* 35	4-950-514-01	WASHER CODE	
* 9	4-950-431-01	CABINET-UPPER		36	A-4660-142-A	RUBBER ASSY. SHEET	
10	4-950-467-01	ADAPTOR-45RPM		37	4-950-469-01	SCREW-SETTING MOTOR	
11	A-4660-140-A	GEAR ASSY. RING		41	1-590-871-11	CORD, CONNECTION (3 CORE)	
12	4-950-432-01	HINGE		△42	1-590-836-11	CORD, POWER (E)	
13	A-4660-138-A	COVER ASSY. DUST		△42	1-551-294-11	CORD, POWER (AEP)	
14	A-4660-384-A	ARM ASSY. TONE		△42	1-696-382-11	CORD, POWER (US, Canadian)	
15	4-944-756-01	STYLUS (ND-155G)		△42	1-696-848-11	CORD, POWER (AUS)	
16	4-950-442-01	SPRING-ELEVATION		43	1-639-237-11	PHONE BOARD	
17	4-950-444-01	WASHER-C/S		44	1-639-239-11	POWER BOARD (E)	
18	4-956-873-01	BUTTON-SPEED		44	1-639-236-11	POWER BOARD (EXCEPT E)	
19	4-956-872-01	BUTTON-REJECT		△46	1-693-159-11	ADAPTER, AC (E)	
20	4-950-448-01	LINK-REJECT		48	4-956-874-01	BUTTON POWER	
21	A-4660-361-A	PANEL (G) ASSY. FRONT		49	4-953-059-01	E RING	
22	4-953-060-01	LEVER. SWITCH		M1	A-4660-141-A	MOTOR ASSY	
23	4-950-470-01	CUSHION-MOTOR		SW1	1-572-746-11	SWITCH, LEAF	
24	4-950-433-01	PLATTER		SW2	1-572-744-11	SWITCH, PUSH (2 KEY) (SPEED)	
25	4-950-435-01	SPACER		△SW3	1-572-744-11	SWITCH, PUSH (POWER)	
26	4-950-436-01	BUSHING-TONE ARM		△SW4	1-572-745-11	VOLTAGE SELECTOR (E)	
27	4-950-437-01	ARM-ELEVATION		△T1	1-450-508-11	TRANSFORMER. POWER	

ELECTRICAL PARTS LIST 【PS-LX52】

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Replace only with part number specified.

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When indicating parts by reference number, please include the board name.

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- CAPACITORS
MF : μF , PF : $\mu\mu\text{F}$
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- AUS: Australian model
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Ref. No.	Part No.	Description	Remarks	Ref. No.	Part No.	Description	Remarks
	1-639-239-11	POWER BOARD (E)		△SW4	1-572-745-11	VOLTAGE SELECTOR (E)	
	1-639-236-11	POWER BOARD (EXCEPT E)		△T1	1-450-508-11	TRANSFORMER, POWER	
	*****			*****			
	< CAPACITOR >					ACCESSORIES & PACKING MATERIALS	

C1	1-124-360-00	ELECT	1000 μF 20% 16V	*	4-947-532-01	SNOW BOX (L)	
				*	4-947-533-01	SNOW BOX (R)	
	< DIODE >			*	4-956-071-01	INDIVIDUAL CARTON	
D1-4	8-719-200-02	DIODE 10E-2			3-756-211-11	MANUAL, INSTRUCTION (English, French, Spanish, Portuguese) (AEP, Canadian)	
*****					3-756-211-21	MANUAL, INSTRUCTION (English) (US)	
	MISCELLANEOUS				3-756-211-41	MANUAL, INSTRUCTION (German, Dutch, Swedish, Italian) (AEP)	
	*****				3-756-211-51	MANUAL, INSTRUCTION (English, French, Spanish, Chinese) (E, AUS)	
41	1-590-871-11	CORD, CONNECTION (3 CORE)			3-756-211-61	MANUAL, INSTRUCTION (English, German, Polish, Russian) (EE, CIS)	
△42	1-590-836-11	CORD, POWER (E)		*****			
△42	1-551-294-11	CORD, POWER (AEP)				HARDWARE LIST	
△42	1-696-382-11	CORD, POWER (US, Canadian)		#1	7-685-246-19	SCREW +KTP 3X8 TYPE2 NON-SLIT	
△42	1-696-848-11	CORD, POWER (AUS)		#2	7-685-903-21	SCREW +PTPWH 3X8 TYPE2	
43	1-639-237-11	PHONE BOARD		#3	7-685-546-19	SCREW	
△46	1-693-159-11	ADAPTER, AC (E)		#4	7-685-104-11	SCREW +P 2X6 TYPE2 NON-SLIT	
SW1	1-572-746-11	SWITCH, LEAF					
SW2	1-572-744-11	SWITCH, PUSH (2 KEY) (SPEED)					
△SW3	1-572-744-11	SWITCH, PUSH (POWER)					

EXPLODED VIEW [PS-LX52P]

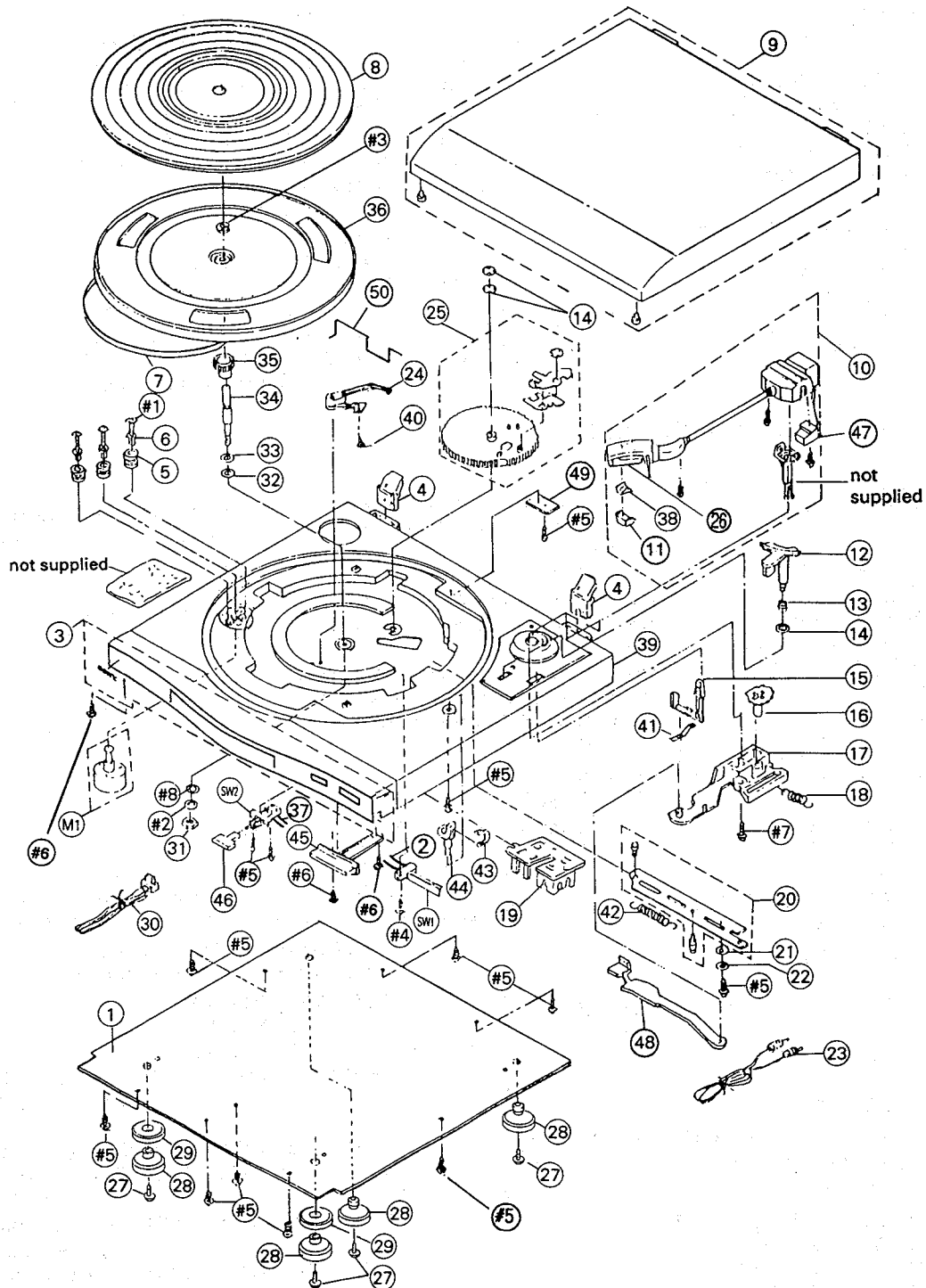
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Ref. No.	Part No.	Description	Remarks	Ref. No.	Part No.	Description	Remarks
1	4-950-488-01	BOTTOM BOARD		6	4-947-504-01	COLLAR	
2	1-696-144-11	WIRE (45) RED		7	4-947-503-01	BELT	
3	A-4660-303-A	PANEL (G) ASSY, FRONT		8	A-4674-087-A	TURN TABLE MAT ASSY	
4	4-947-476-01	HINGE		9	A-4604-946-A	DUST COVER ASSY	
5	4-947-505-01	CUSHION, MOTOR					

Ref. No.	Part No.	Description	Remarks	Ref. No.	Part No.	Description	Remarks
10	A-4604-940-A	ARM ASSY, TONE		30	1-557-109-21	DC CORD	
11	4-948-095-01	COVER CARTRIDGE		31	4-947-510-01	NUT	
12	4-947-466-01	TONE ARM ELEVATOR		32	3-451-162-00	WASHER (56)	
13	4-947-467-01	SPRING (6)		33	3-701-445-21	WASHER	
14	4-947-514-01	4MM CS RING		34	4-947-498-01	STELL BALL	
15	4-947-468-01	LEVER, CUEING		35	4-947-497-01	GEAR	
16	4-947-470-01	ADJUST CAM		36	4-947-494-01	TURNTABLE PLATTER	
* 17	4-947-471-01	LINK, RETURN		37	1-696-143-11	WIRE (30) (WHT)	
18	4-947-472-01	SPRING (9-1)		38	4-951-290-01	STYLUS (CN234)	
19	4-956-998-01	BUTTON BASE		39	4-947-475-01	MAIN CABINET (G)	
20	A-4660-302-A	LEVER RETURN ASSY		40	4-947-496-01	SPRING (34)	
21	3-659-350-00	WASHER		* 41	4-947-477-01	CUEING (BASE)	
22	4-890-173-00	WASHER		42	4-947-485-01	SPRING (22)	
23	1-555-116-11	PHONO CORD		43	4-947-490-01	ARM CLIP	
24	4-947-495-01	WIPER REJECT		44	4-947-491-01	ARM REST	
25	A-4604-916-A	GEAR ASSY, SPUR		45	4-956-997-01	KNOB REJECT	
26	1-251-028-11	CARTRIDGE (MAIN)		46	4-956-996-01	KNOB SPEED	
27	4-950-497-01	FOOT SEAT		47	4-947-464-01	COUNTER WEIGHT	
28	4-950-490-01	PLASTIC STAND		* 48	4-947-487-01	RETURN LINK	
29	4-950-489-01	FOOT RING		49	1-644-410-11	P.C BOARD	
				50	4-948-101-01	SPRING (38)	

ELECTRICAL PARTS LIST [PS-LX52P]

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Ref. No.	Part No.	Description	Remarks	Ref. No.	Part No.	Description	Remarks
23	1-555-116-11	PHONO CORD		HARDWARE LIST			
30	1-557-109-21	DC CORD					
* 49	1-644-410-11	P.C BOARD		#1	7-621-773-87	SCREW +B 2.6X10	
M1	A-4604-945-A	MOTOR ASSY		#2	7-623-210-22	SW4, TYPE 2	
SW1	1-570-666-11	SWITCH (MOTOR)		#3	7-624-110-04	STOP RING 6.0, TYPE-E	
SW2	1-571-089-11	PUSH SWITCH (SPEED)		#4	7-685-105-19	SCREW +P 2X8 TYPE 2 NON-SLIT	
*****				#5	7-685-647-79	SCREW +BVTP 3X10 TYPE 2 IT-3	
ACCESSORIES & PACKING MATERIALS				#6	7-685-646-79	SCREW +BVTP 3X8 TYPE 2 IT-3	
*****				#7	7-685-645-79	SCREW +BVTP 3X6 TYPE 2 IT-3	
*	4-947-532-01	SNOW BOX (L)		#8	7-688-005-01	W5, SMALL	
*	4-947-533-01	SNOW BOX (R)					
*	4-957-002-01	CARTON					
